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AIRCRAFT AND EQUIPMENT MAINTENANCE MANAGEMENT

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AFI 21-101, Aircraft and Equipment Maintenance Management, 26 July 2010 and COMBATAIRFORCE1, 28 December 2010 are supplemented as follows. This supplement applies to all 9th Reconnaissance Wing personnel who perform aircraft or equipment maintenance, and personnel who work in the flight line area or respond to aircraft incidents, including all subordinate forward operating locations. This supplement provides guidance and procedures for maintenance, documentation, and support of U-2, RQ-4 and T-38 aircraft and RQ-4 ground segments. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. Send comments and suggested changes on AF Form 847, Recommendation for Change of Publication, to 9 MXG/QA, 19501 Edison Dr., Beale AFB CA 95903. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance

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SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed.

- 1.13.1. Dock boxes in aircraft hangars/docks are designated office/break areas. Personal electronic devices are authorized for use inside the dock box. Personal electronic devices will not be used in open break areas designated within hangars/docks. See Para 14.19.24.2. and 14.19.24.3.2 for requirements passing through the flight line.
- 1.13.1.1. (Added) Government issued cell phones used in duty positions requiring turnover to an oncoming individual must be accounted for at each shift turnover (production super, expeditor, etc.).
- 1.13.1.2. (Added) CFSR cell phones used on the flight line will be controlled in the same manner as government-issued cell phones. They must be purchased by the contractor's company for the purpose of conducting official business and clearly marked with the company name, contact and contact phone number.
- 1.13.1.3. (Added) Personnel from units who do not normally work on the flight line (9 CS/9 CES, etc.) or contractors supporting those units will ensure government, company, and personal cell phones are secured in a vehicle, pocket or sealed bag and not used while on the flight line. The only exception is a cell phone may be used if required in the line of duty to execute/complete assigned work or to report an emergency. All cell phones will be accounted for prior to leaving the flight line.
- 1.17.1. (Added) The following list is intended as a guide to be used in establishing priorities for competing limited resources and POL servicing. This list is based off the maintenance priorities in AFI 21-101 table 1.1 and can be lowered or raised to meet mission requirements.
- 1.17.1.1. (Added) 1. Aircraft on alert status (NAOC), war plan or national emergency missions, including related AGE. 2. Air evacuation or rescue aircraft, including AGE. 3. Primary mission aircraft, U-2 and RQ-4, within 6 hours of launch as dictated by the flying schedule, including AGE. 4. All training T-38 aircraft, including AGE. 5. All transient aircraft, including AGE.
- 3.4.1.53. No local requirements exist for the ASIP on the U-2 aircraft. Oversight for the ASIP is monitored by the manufacturer. The ASIP Manager for the U-2 is 560 ACSG office located at Robins AFB. No local requirements currently exist for ASIP on the RQ-4 aircraft. The ASIP program is in development for the RQ-4. The ASIP Manager for the RQ-4 is ASC/WIGE office located at WPAFB.
- 3.4.1.61.1. (Added) MXG Repeat/Recur and Cannot Duplicate Discrepancies.

- 3.4.1.61.1.1. (Added) Repeat/Recur Discrepancy responsibilities and procedures.
- 3.4.1.61.1.1. (Added) Production superintendents will monitor pilot code reports (squawks) for both the aircraft and installed sensors and ensure the most qualified technician available responds to maintenance debrief to address PRD.
- 3.4.1.61.1.1.2. (Added) Debrief will:
- 3.4.1.61.1.1.2.1. (Added) Access IMDS screen 123, *Maintenance Repair History Inquiry*, (or compatible automated system), for the last five sorties when an aircraft lands with a PRD and determine if the discrepancy is a repeat/recur. In the event IMDS is down, debrief will review the locally developed manual debriefing forms for the same time period.
- 3.4.1.61.1.1.2.2. (Added) Enter "Repeat/Recur" in red in the discrepancy block, followed by the discrepancy.
- 3.4.1.61.1.1.2.3. (Added) For a second repeat/recur, make an additional red dash entry in the next block stating: Corrective action for repeat/recur discrepancy due review by section chief.
- 3.4.1.61.1.1.2.4. (Added) If a third or subsequent repeat/recur occurs, make an additional red dash entry in the next block stating: Forms review required by maintenance supervision for repeat/recur.
- 3.4.1.61.1.1.3. (Added) Initial repeat/recur discrepancies will be signed off by a technician on a SCR course code 002111.
- 3.4.1.61.1.1.4. (Added) Second repeat/recur discrepancies will be signed off by a technician on SCR course code 002111. In section chiefs absents, the lead technician or authorized production superintendent may sign off the additional red dash. The AMU/MXS production superintend or FOL equivalent will notify AMU OIC/SUPT or FOL equivalent if corrected by a flight line technician and the MXS MOO/SUPT or FOL equivalent if corrected by a support shop technician.
- 3.4.1.61.1.1.5. (Added). The AMU OIC/SUPT or FOL equivalent will notify AMXS MOO/SUPT or FOL equivalent of any second or grater repeat/recur discrepancies. After notification, the AMXS MOO/SUPT or FOL equivalent will consider if an impoundment or other action is necessary.
- 3.4.1.61.1.1.6. (Added) Third or greater repeat/recur discrepancies will signed off by a technician by on a special certification roster course code 002111. The maintenance supervision review will be completed by the AMU OIC/SUPT or FOL equivalent if corrected by a flight line technician and the appropriate flight commander/chief if corrected by a support shop technician.
- 3.4.1.61.1.1.7. (Added) The AMXS MOO/SUPT or FOL equivalent will notify the MXG/CC or FOL CC of any fourth or grater repeat/recur discrepancies. The MXG/CC or FOL CC will review corrective actions and make a determination whether impound or other action is warranted.

- 3.4.1.61.1.1.8. (Added) If parts reparable at the base level are removed for repair or bench check, the individual discovering the discrepancy will annotate an AFTO Form 350, with "Repeat," "Recur" or "Abort/Incident" as appropriate.
- 3.4.1.61.1.1.9. (Added) For direct-NRTS parts, the technician who removed the item will review an IMDS screen 105, *Maintenance History Report*, to determine if the part was associated with similar discrepancies in the past, particularly if those were repeat, recur or CND discrepancies.
- 3.4.1.61.1.10. (Added) If there is a history, elevate the situation to a lead technician or section chief to determine if sufficient history exists to suspect the item as a "Bad Actor."
- 3.4.1.61.1.11. (Added) If history warrants, the lead technician or section chief will ensure a deficiency report (DR) is submitted highlighting the item as a "Potential Bad Actor."
- 3.4.1.61.1.1.12. (Added) Work centers performing off-equipment maintenance will:
- 3.4.1.61.1.12.1 (Added) Ensure highly qualified technicians inspect components identified with aircraft repeat/recur, or abort/incident malfunctions.
- 3.4.1.61.1.1.12.2 (Added) When a component or LRU associated with an aircraft repeat/recur discrepancy bench checks good, the support shop technician will evaluate component history and maintenance actions using IMDS screen 105 to determine if the LRU is a potential bad actor.
- 3.4.1.61.1.12.3 (Added) If the component or LRU has no history of similar malfunctions, ensure a qualified individual signs the inspector's block of DD Form 1574, Serviceable Tag, and immediately notify the appropriate on-equipment work center of the results.
- 3.4.1.61.1.12.4. (Added) If the LRU/component bench checks bad, notify the appropriate on-equipment work center of the results and follow the procedures above to determine if the item is a potential "Bad Actor." For items with a history of similar malfunctions, annotate "Potential Bad Actor" on the AFTO Form 350 and generate a DR. The DR will then be properly processed.
- 3.4.1.61.1.2. (Added) CND Responsibilities and Procedures.
- 3.4.1.61.1.2.1. (Added) For work centers performing on-equipment maintenance.
- 3.4.1.61.1.2.1.1. (Added) When a discrepancy cannot be duplicated, the technician signing off the task will be on a special certification roster (course code 002110). To clear the discrepancy, the technician will document "Cannot Duplicate Malfunction" in corrective action block, and clear the symbol IAW T.O. 00-20-1.
- 3.4.1.61.1.2.1.2. (Added) If a previous CND discrepancy returns and meets repeat/recur criteria, procedures for review will then follow repeat/recur procedures.
- 3.4.1.61.1.2.2. (Added) For work centers performing off-equipment maintenance.

- 3.4.1.61.1.2.2.1. (Added) When a component or LRU associated with an aircraft CND discrepancy bench checks good, the support shop technician will evaluate component history and maintenance actions using IMDS screen 105 to determine if the LRU is a potential "Bad Actor."
- 3.4.1.61.1.2.2.2. (Added) If the component or LRU has no history of similar malfunctions, ensure a qualified individual signs the inspector's block of DD Form 1574, *Serviceable Tag*, immediately notify the appropriate flight line organization the component was a CND and return the unit to supply.
- 3.4.1.61.1.2.2.3. (Added) If the component or LRU has a history of similar malfunctions, the support shop technician will annotate "Potential Bad Actor" on the AFTO Form 350, *Repairable Item Processing Tag*, and generate a DR. The DR will then be properly processed.
- 3.4.1.3. Will include the development and use of emergency action/functional checklists by FOL/subordinate units.
- 3.4.1.74. See Para 5.10.2.2 through 5.10.2.13.
- 3.7.21. (Added) Squadron commanders will assign in writing a primary and alternate squadron personal wireless communication system (PWCS) manager.
- 3.7.21.1. (Added) Unit PWCS managers are responsible for their unit's LMR inventories.
- 3.7.21.2. (Added) Inventories are tracked to the unit via an account code in the Automated Inventory Management (AIM) system.
- 3.9.42. (Added) AMU OIC/Superintendents (or equivalent) will appoint dash 21, (Type I) equipment custodians (primary and alternate) in writing, identifying individuals by name, grade and telephone number.
- 3.10.27.1. (Added) Dash 21 program.
- 3.10.27. 1.1. (Added) AMU will:
- 3.10.27.1.1.1 (Added) Ensure dash 21 equipment is marked with aircraft tail number or composite tool kits (CTK) EID number.
- 3.10.27.1.1.2. (Added) Ensure annual dash 21 inventory is conducted and documented on AF Form 2692.
- 3.10.27.1.1.3. (Added) Enforce maintenance and control of all aircraft dash 21 Type I equipment.
- 3.10.27.1.2. (Added) Support Sections will:
- 3.10.27.1.2.1. (Added) Use AF Forms 2691 and 2692 to account and inventory all dash 21 Type

- 3.10.27.1.2.2. (Added) Maintain a current copy of AMU or equivalent appointment letter for dash 21 equipment custodians.
- 3.10.27.1.2.3. (Added) Ensure accountability of dash 21 equipment IAW AFI 21-103 and MAJCOM supplements.
- 3.10.27.1.2.4. (Added) Ensure all requirements are met for transfer and acceptance of dash 21 equipment IAW AFI 21-103.
- 3.10.27.1.2.5. (Added) Provide a copy of the dash 21 equipment custodian appointment letter to PS&D.
- 3.10.27.1.3. (Added) U-2S/ST Procedures.
- 3.10.27.3.1. (Added) Dash 21 equipment will be inspected for serviceability, inventoried every 30 days and the inspection documented in the aircraft 781 forms.
- 3.10.27.3.2. (Added) Dash 21 equipment will be placed on dash 21 shadow board and panel rack shadow board in aircraft shelter when aircraft is in flight or maintenance actions dictate.
- 3.10.27.3.3. (Added) All shadow boards will have a shadowed silhouette of the corresponding dash 21 items.
- 3.10.27.3.4. (Added) FOLs may store dash 21 equipment on aircraft cockpit work stand (Haw Dah) or aircraft panel racks when aircraft is in flight or maintenance actions dictate.
- 3.10.27.3.5. (Added) Aircraft parked on open ramp spots will use A-1 bags for temporary storage of dash 21 equipment while aircraft is flying.
- 3.10.27.3.6. (Added) Crew chiefs are responsible for the dash 21 inventory upon aircraft movement using an inventory listing.
- 3.10.27.3.7. (Added) Expeditors are responsible for control of dash 21 equipment when aircraft locations change (DCC for FOLs.)
- 3.10.27.3.8. (Added) The dash 21 A-bag will be marked with applicable aircraft tail number.
- 3.10.27.4. (Added) RQ-4 procedures.
- 3.10.27.4.1. (Added) Dash 21 equipment listed on AF Form 2692 is considered Type I alternate mission equipment.
- 3.10.27.4.2. (Added) Dash 21 equipment not maintained by support will be inspected for serviceability and inventoried every 30 days. This inventory will be documented in the aircraft 781 series forms.

- 3.10.27.4.3. (Added) Dash 21 equipment will be stored in dash 21 A-bag or identified storage area when not in use or aircraft is in flight.
- 3.10.27.4.5. (Added) The dash 21 A-bag will be marked with applicable aircraft tail number. 3.10.27.4.6. (Added) Crew chiefs are responsible for the dash 21 inventory upon aircraft movement using an inventory listing.
- 4.6.5. Account for oxygen/nitrogen levels and notify AGE driver if carts need delivered to a servicing/maintenance facility.
- 4.6.10.1. (Added) will ensure oil cart sampling is completed IAW Para 14.38.12.
- 4.7.1. The aircraft, LRE and MCE will be debriefed as a complete package taking place at the aircraft landing location. After ERT/Ferry flights, the leg of the mission from where the aircraft originated will conduct the debrief on all Air Force elements.
- 4.7.1.2. (Added) Immediately notify both maintenance squadron and appropriate AMU production superintendents or FOL equivalents. Production superintendents will ensure the required personnel are present for the debrief.
- 4.7.1.2.1. (Added) Deployed debriefing will:
- 4.7.1.2.1.1. (Added) Ensure debriefing discrepancies and sorties are loaded into IMDS as soon as possible or after the last flight of the day. Only during extenuating circumstances (i.e. IMDS is down) will the debrief information not be loaded the same day.
- 4.7.1.2.1.2. (Added) Use manual forms/documentation procedures when IMDS is not available.
- 4.7.1.2.1.3. (Added) Ensure appropriate deployed utilization codes are used when entering data into IMDS.
- 4.7.1.2.1.4. (Added) Verify accuracy of inputs daily through active communication with home station debrief section or designated squadron point of contact.
- 4.7.1.2.1.5. (Added) Forward flight data files via properly secure electronic media to home station debrief for posting on secure database.
- 4.7.1.2.1.6. (Added) Sortie line number assignment will be as directed in Beale AFB Instruction 21-165 2.3.1. Cross-country line numbers are assigned by the MOC.
- 4.7.1.2.1.7. (Added) AMU debrief sections will input flight debrief data into IMDS no later than 1-duty day after said aircraft has flown.
- 4.7.3.1. (Added) Reconcile daily sortie/hour totals against AFTO Form 781s with MOS, PS&D

section, and Operation Squadron each day.

- 4.7.3.2. (Added) Reconcile end-of-month totals from the previous month and current to date sortie/hour totals for the month with MOS, PS&D, and notify MOS, PS&D and Engine Management of all operational time updates; add/delete transactions after input into IMDS NLT noon the fourth day of each month.
- 4.7.5. Ensure debriefing discrepancies and sorties are loaded into IMDS as soon as possible after flight. Only during extenuating circumstances (i.e. IMDS is down) will the debrief information not be loaded the same day.
- 4.7.5.1. Use the appropriate 9 MXG Red X Criteria Sheet (**Attachment 16** for U-2, **Attachment 17** for RQ-4, **Attachment 18** for RD-2A and **Attachment 19** for RD-2B) to identify Red X conditions. Red X criteria listings do not preclude maintenance and aircrew subjective judgment on any safety of flight condition serious enough to warrant use of Red X symbols under the guidelines of T.O. 00-20-1 criteria for Red X entries. These listings do not substitute for quality aircrew debriefing by experienced maintenance personnel. An annual review will be accomplished on the Red X criteria for both MDS and documented during a unit self-inspection.
- 4.7.5.2. (Added) Maintain detailed debriefing procedures in continuity books in the AMU debrief sections.
- 4.7.5.3. (Added) Maintain preprinted IMDS debrief packages for manual debriefs for all aircraft assigned in the AMU Debrief Section.
- 4.8.1.15. Individuals who remove reparable assets from aircraft or other end items will ensure the reparable asset is cleaned and turned into the proper support/repair function with all required documentation NLT end of the shift.
- 4.8.1.18. (Added) Store, control, transport, service, drain and sample oil from assigned oil/hydraulic carts.
- 4.8.1.19. (Added) Service oil and hydraulic carts with fluid as needed.
- 4.8.1.20. (Added) Ensure hydraulic and oil carts are placed in a designated area under protective shelters when not in use.
- 4.8.1.21. (Added) Connect or cap all cart hoses to prevent contamination.
- 4.8.1.22. (Added) 99 AMU (99 RS flight line MX) will control bowsers UFB1, UFB2, UFB4, and UFB6.
- 4.8.1.23. (Added) 12 AMU (12 RS flight line MX) will control bowsers KB03, KB04, KB08, KB80, KB81 and KB82.
- 4.8.1.24. (Added) Control access to fuel bowsers by locking access lids and control the keys

- using the Tool Accountability System, (exempt for FOLs who do not control bowsers).
- 4.8.1.25. (Added) Drain accumulated water from assigned fuel bowsers, and if contaminated, drain and dispose of product.
- 4.8.1.26. (Added) Place protective covers on aircraft jacks or place inside a shelter when not in use.
- 4.8.1.27. (Added) Prepare all AGE for movement, i.e., roll up hoses, cables, secure all access panels.
- 4.8.1.28. (Added) Clean up areas where AGE equipment is used.
- 4.8.1.29. (Added) Annotate all discovered discrepancies on the AFTO Form 244 attached to the unit, verbally communicate problems with units to either an AGE driver or the AGE dispatch function and report to the AGE flight dispatch function if the AFTO Form 244 is full or damaged beyond use.
- 4.8.1.30. (Added) Document all servicing actions for oxygen carts on the AFTO Form 134 attached to the unit and report to the AGE driver if the AFTO Form 134 is full or damaged beyond use.
- 4.8.1.31. (Added) Document all servicing actions for oil and hydraulic carts on the oil and hydraulic cart servicing logs attached to the carts. Report to the AGE driver if the log is full or damaged beyond use.
- 4.8.3.1. Optional for FOLs and PDM.
- 4.8.3.2. To include accomplishment of deferred discrepancy corrective actions.
- 4.8.3.3. (Added) Be appointed it writing.
- 4.8.3.4. (Added) Attend a formal DCC course no later than 6 months after assignment as a DCC. ADCC will attend the formal DCC course within the first 12 months of assignment as ADCC. MXG/CC may waive course attendance when extreme circumstances warrant.
- 4.12.8. (Added) When AMU (or equivalent) is the primary using organization, support sections will be responsible for ownership and maintenance of engine run cables and associated fittings, 2-step stands and non-rolling wing stands (RG 305/GH149 Wing Supports), Happy Carts (RG 920 Motor Valve Cart Assemblies), Spider Boxes, and locally fabricated assemblies specifically designed for U-2 defuel and refuel operations. FOLs exempt if equipment is not assigned to support due to mission requirements.
- 5.5.4.1.4. The primary aircraft open fuel tank maintenance facility for Beale AFB is building

- 1077 (dock 4). All open fuel tank maintenance must be accomplished in the primary repair location before using an approved alternate location. Building 1075 (dock 3) and building 1072 (wash rack) are the only alternate open fuel tank maintenance facilities.
- 5.6.1.2.1. AGE does not maintain maintenance stands, aircraft stands, and dollies specifically assigned to other maintenance shops.
- 5.6.1.6. (Added) AGE will perform all fuel bowser towing and place fuel bowsers on blocks for drain preparation.
- 5.6.1.7. (Added) AGE will respond to notifications of full/damaged AFTO Form 134 with replacement and file all full forms for 1 year.
- 5.6.1.8. (Added) AGE will replace all full/damaged oil and hydraulic cart servicing logs upon notification of user. AGE will maintain on file all full oil and hydraulic cart servicing logs (only the most recent completely filled out log will be maintained on file).
- 5.6.3.7. (Added) Report all suspected AGE abuse incidents to 9 MXS or FOL equivalent.
- 5.6.6. AGE flight ready-lines are located on the north and south sides of building 1225. Powered and non-powered AGE not being used will be parked in their designated sub-pool location or the AGE flight's ready-line.
- 5.10.2.2. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot canopy system and related mechanical mechanisms (excluding airframe, hinge seals and M-13 thruster).
- 5.10.2.3. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot aircraft aileron surface, tabs, and the trim and control system along with related mechanisms.
- 5.10.2.4. (Added) Rig, adjust, operationally check, and troubleshoot aircraft stall strips (exclude removal and installation of stall strips and electrical components).
- 5.10.2.5. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot landing gear struts, doors, and emergency and control systems along with related mechanical mechanisms (excluding electrical, hydraulic, and tire assemblies).
- 5.10.2.6. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot aircraft throttle control system (excluding fuel control linkage and mechanism).
- 5.10.2.7. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot aircraft canopies, windscreen assemblies, and transparent surfaces.

- 5.10.2.8. (Added) Remove and install wing assemblies (excluding electrical, fuel, and hydraulic components).
- 5.10.2.9. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot aircraft elevator surface, tabs and the control system along with related mechanisms (excluding servo motor and capstan).
- 5.10.2.10. (Added) Rig, adjust, operationally check, and troubleshoots aircraft flap surface and control system along with mechanisms (excluding electrical and hydraulic components).
- 5.10.2.11. (Added) Remove, install, rig, adjust, operationally check, and troubleshoot rudder surface and the control system along with related mechanisms (excluding servo motor and capstan).
- 5.10. 2.12. (Added) Remove, install, adjust, operationally check, and troubleshoot vertical stabilizer and related mechanisms.
- 5.10.2.13. (Added) Remove, install, adjust, operationally check, and troubleshoot the aircraft horizontal stabilizer and control system along with related mechanisms.
- 5.10.6. As applicable at FOL in accordance with local guidance and procedures.
- 5.10.6.14. (Added) Will ensure oil cart sampling is completed IAW Para 14.38.12.
- 5.12.1.17.1. (Added) Each flight OIC/Chief/NCOIC responsible for personnel who blend damaged jet engine compressor blades will initiate a Blade Blend Certifying Official Appointment Letter and CAF Form 64 and route for 9 MXG/CC.
- 5.12.1.17.2. (Added) Each unit requiring certifiers will have a minimum of one technician appointed to cover their requirements.
- 5.12.1.24. (Added) Ensure Engine Management along with the 9 MXS Propulsion Flight/FOL Specialist Section creates and loads a JST in IMDS/CAMS for all required engine borescope inspections.
- 5.12.4.7.1.12. See Para 14.14.8 for additional documentation procedures.
- 5.12.8. Maintain U-2 tailpipe stands.
- 6.2.2.4. Publish local call signs for maintenance functions, (Attachment 20).
- 6.2.2.9.1.1. (Added) Check IMDS or CSR to verify the engine operator is current in all engine run course codes prior to approving operation.
- 6.2.2.9.1.2. (Added) Maintain log of all engine runs performed by maintenance personnel. Engine run logs will include:

- 6.2.2.9.1.2.1. (Added) Engine operator's employee number.
- 6.2.2.9.1.2.2. (Added) Calendar date and time.
- 6.2.2.9.1.2.3. (Added) Aircraft tail number.
- 6.2.2.9.1.2.4. (Added) Power setting.
- 6.2.2.9.1.2.5. (Added) Location (parking spot/number).
- 6.2.2.9.1.2.6. (Added) Reason for run.
- 6.2.2.9.1.2.7. (Added) Initials of MOC coordinator authorizing the run.
- 6.2.2.9.1.3. (Added) Provide engine run logs to MTF NLT 1600 the last duty day of each week.
- 6.2.2.9.1.4. (Added) Ensure host deployed personnel's engine run data is forwarded to Beale MTF NLT 1600L the last duty day of each week.
- 6.2.2.10.2. (Added) Initiates changes of emergency action/functional checklists, when required.
- 6.2.2.10.2.1. (Added) Will coordinate checklist with:
- 6.2.2.10.2.1.1. (Added) All affected unit operations officers/superintendents.
- 6.2.2.10.2.1.2. (Added) All affected unit commanders.
- 6.2.2.10.2.1.3. (Added) FOL OA.
- 6.2.2.10.2.1.4. (Added) 9 MOS/MXOOM.
- 6.2.2.10.2.1.5. (Added) 9 MXG/QA.
- 6.2.2.10.2.1.6. (Added) 9 MXG/CCE.
- 6.2.2.10.2.1.7. (Added) 9 MXG/CEM.
- 6.2.2.10.2.1.8. (Added) 9 MXG/CD.
- 6.2.2.10.2.1.9. (Added) 9 MXG/CC.
- 6.2.2.10.2.2. (Added) Ensures copies of emergency action/functional checklists that involve other agencies are coordinated with those agencies.
- 6.2.2.10.2.3. (Added) Provides copies of all emergency action/functional checklists that involve other wing agencies to the 9 RW Plans and Programs Office.

- 6.2.2.24.4. (Added) Function as the office of primary responsibility to ensure adequate communication is available and oversee the non-tactical radio net.
- 6.2.2.27. As applicable at FOL in accordance with local guidance and procedures.
- 6.2.3.16. When Comprehensive Engine Management System (CEMS)/IMDS is down; these manual back-up procedures apply:
- 6.2.3.16.1. (Added) All flight line engine maintenance performed will be documented on AFTO Forms 349 and delivered to the EM office no later than 24 hours after maintenance is performed. All document review data will be documented and retained by the EM office until it can be input in the CEMS/IMDS databases. All data will be retained in date-time order.
- 6.2.3.16.2. (Added) Initiate AFTO Forms 95 for all historical documentation and maintain in engine folders until applicable systems are on line. Copies of all inbound and outbound shipping documents will be maintained by the EM office until it can be input in the CEMS/IMDS databases.
- 6.2.3.16.3. (Added) In the event IMDS is down at an FOL or deployed location, manual documentation will be maintained at unit until system has resumed. If IMDS is down for 5 working days or more data will be submitted to EM for input into CEMS. Data will then be loaded into IMDS the day it becomes functional.
- 6.2.3.17. Deployed units will send all U-2 and RQ-4 engine overfly requests to the EM office to be forwarded to the appropriate agency for approval. The following blanket overflies are hereby authorized in order for the engine to meet the aircraft periodic inspection. POC is 9 MOS/MXOOE (Engine Management), DSN 368-9376/3848/9375.
- 6.2.3.17.1. (Added) In accordance with 1U-2S-6, Chapter 3, System 27000, Para 2 a blanket 10% overfly of the engine pyrometer P/N 1344M74P10 on all F118 engines is authorized.
- 6.2.3.17.2. (Added) In accordance with 1U-2S-6, Chapter 1, Section IV, Para 12, a blanket 20 hour overfly of the engine 200/400-hour inspections on all FI18-GE-101 engines and a blanket 20 hour overfly of the 200/800-hour inspections on the F118-GE-101A engines is authorized. Overfly requests that exceed 20 hours must be pre-coordinated through the 9 MOS/MXOOE (Engine Management Element), HQ ACC with 560 ACSG/LXE, U-2 OC-ALC Engineering as final written approval.
- 6.2.3.17.3. (Added) In accordance with 1U-2S-6, Chapter 3, Section 1, System 27Z00, item 2&3 a blanket 100-hour overfly of the engine 2800/3200-hour engine inspection on all F118-GE-101/101A engines is authorized.

- 6.2.3.17.4. (Added) FOL maintenance scheduler will:
- 6.2.3.17.4.1. (Added) Order TCTO kits upon receipt of AF Form 2001 from the EM office and inform EM when kits are received.
- 6.2.3.17.4.2. (Added) Order all time change parts coming due through their local supply channels and inform the EM office of the document number and when part is on hand.
- 6.2.3.17.4.3. (Added) Send EM the current engine operating time, cycles/sorties as appropriate to the 9 MOS/MXOOE inbox utilizing the Engine Management Document Review coordination sheet, (MXG Form 1) for every engine document review.
- 6.2.3.19.2.1. See paragraph 14.14.8. for additional documentation procedures.
- 6.2.3.19.2.5. (Added) Engine Management (EM) will:
- 6.2.3.19.2.5.1. (Added) Designate all 9 RW assigned engines in IMDS.
- 6.2.3.19.2.5.2. (Added) Assigned engines except those assigned to the 5 RS and FOL's for the Global Hawk engines are designated "A unit in IMDS
- 6.2.3.19.2.5.3. (Added) 5 RS assigned engines are designated "D unit. Global Hawk engines assigned to Det 3 are in J unit and engines assigned to Det 4 are in S unit.
- 6.2.3.19.2.5.4. (Added) Serve as point of contact for all engine TCTOs and one-time inspections to include chairing TCTO meetings and maintaining all required documentation. EM will load all TCTO's for all engines and engine related support equipment at the FOL's to include 5 RS.
- 6.2.3.19.2.5.5. (Added) Forward all engine/engine components overfly requests to the appropriate agency for approval.
- 6.2.3.19.2.5.6. (Added) Screen all aircraft selected for possible deployment, program depot maintenance, and periodic inspections for scheduling all possible engine TCTOs, component time changes, or special inspections.
- 6.2.3.19.2.5.7. (Added) Coordinate removal dates with each AMU or equivalent and propulsion flight/element for all scheduled engine and component time changes. Ensure these requirements are published in the weekly and monthly aircraft maintenance utilization plan.

- 6.2.3.19.2.5.8. (Added) Provide CEMS background data for deficiency reports/warranty claims when required and aid in completing reports.
- 6.2.3.19.2.5.9. (Added) Provide propulsion flight/element and each AMU/equivalent engine maintenance planning products when requested.
- 6.2.3.19.2.5.10. (Added) Load and verify all components/engines into IMDS within 24 hours of receipt from supply/transportation management office and make an automated entry in the CEMS/IMDS databases verifying receipt.
- 6.2.3.19.2.5.11. (Added) Process and clear all maintenance transactions in the EM suspense file (IMDS screen 128) by close of business the duty day they are received. Priority transactions may be called in to EM for immediate processing during non-duty hours.
- 6.2.3.19.2.5.12. (Added) Furnish an appointment letter to all FOLs with name, rank, and duty location of appointed FOL/deployed engine monitor upon initial assignment.
- 6.2.3.19.2.5.13. (Added) Accomplish these actions daily:
- 6.2.3.19.2.5.13.1. (Added) Update engine-flying hours/cycles/sorties using the Flytime Program.
- 6.2.3.19.2.5.13.2. (Added) Update Spare Status Slide daily.
- 6.2.3.19.2.5.13.3. (Added) Attend the Daily Production Meeting (normally held in the MXG Conference Room) to brief the spare engine slide to MXG/CC.
- 6.2.3.19.2.5.13.4. (Added) Review and clear IMDS screen 128. Update CEMS (automated entry required).
- 6.2.3.19.2.5.13.5. (Added) Process the Engine Manager Data Listing (EMDL) in CEMS/TSOA, option L.
- 6.2.3.19.2.5.13.6. (Added) Update the Aircraft/Engine board as changes are made.
- 6.2.3.19.2.5.13.7. (Added) Update engine historical data as changes occur.
- 6.2.3.19.2.5.13.8. (Added) Check the office/organizational e-mail inbox.
- 6.2.3.19.2.5.14. (Added) Accomplish these actions weekly:
- 6.2.3.19.2.5.14.1. (Added) Process the Time Change and Inspection Forecast (E373) in CEMS using TSOA option S and send the reports to 9 MOS/MXOOP to update the Maintenance Scheduling Application Tool (MSAT) program.

- 6.2.3.19.2.5.14.2. (Added) Run E373 and update the F118 Time Change Slide and forecasts for all F118, F137 and J85 engines (ensure that propulsion flight/element receives a copy of the F118 and F137 forecasts.) Using this information products, schedule jobs as necessary.
- 6.2.3.19.2.5.14.3. (Added) Perform periodic quality audits in IMDS/CEMS to ensure timeliness of reporting and to ensure IMDS mirrors CEMS data base history.
- 6.2.3.19.2.5.14.4. (Added) Check and correct IMDS/REMIS errors, using screen 690.
- 6.2.3.19.2.5.14.5. (Added) Check for TO changes in account 18 of the TO distribution office.
- 6.2.3.19.2.5.14.6. (Added) Check TCTOs using IMDS screen 525. Print out new 525's and file in the appropriate TCTO folder. Verify the 525 printout against the F036 (TSOA) printout from CEMS. Ensure that status codes mirror each other. Correct any discrepancies and file the 525/F036 printouts in their appropriate TCTO folders.
- 6.2.3.19.2.5.14.7. (Added) Check and correct CEMS suspended errors, using IMSA, screen A205.
- 6.2.3.19.2.5.15. (Added) Accomplish these actions monthly:
- 6.2.3.19.2.5.15.1. (Added) Coordinate with the propulsion flight/element chief to develop a detailed 6-month engine TCI removal forecast to ensure components are not flown past their due time. Accomplish forecast monthly using CEMS product E373. Provide a copy of the forecast to the AMU/equivalent and propulsion flight/element supervision, 5 RS Plans, Scheduling & Documentation Section (for inclusion in the Wing Monthly Maintenance Plan) and the Command Engine Manager NLT the last week of the month before the affected month.
- 6.2.3.19.2.5.15.2. (Added) Attend the Supply TCTO/TCI Reconciliation Meeting, file meeting minutes in the Engine Listings Book.
- 6.2.3.19.2.5.15.3. (Added) Update flying hours using the Flytime Program before the last duty day of the month to ensure WR-ALC/LX has the most current flying hours for beginning-of-themonth reports.
- 6.2.3.19.2.5.16. (Added) Accomplish these actions quarterly:
- 6.2.3.19.2.5.16.1. (Added) Request a copy of the Quarterly Inventory Status Report by the 20th of Mar, Jun, Sep and Dec using CEMS/TSOA, option L. Verify all information. Sign and return the original to OC-ALC/TILC, Tinker AFB, OK, via mail or FAX.
- 6.2.3.19.2.5.16.2. (Added) Accomplish and report TCTO reconciliation to OC-ALC/TILC and the Command Engine Manager within 20 working days after the end of each quarter. Use IMDS screen 525, and CEMS/TSOA, F036. Reports are due in Mar, Jun, Sep and Dec. Once accomplished, E-Mail a statement to OC-ALC/TILC, stating the reconciliation was accomplished.

- 6.2.3.19.2.5.16.3. (Added) Complete the local Quarterly Audit Checklist.
- 6.2.3.19.2.5.16.4. (Added) Process an E407 in CEMS and Multiple Tracked Equipment (MTE) in IMDS for every engine assigned, verify, download onto disk and file in the E407/MTE folder.
- 6.2.3.19.2.6. (Added) All units providing Propulsion Functions will:
- 6.2.3.19.2.6.1. (Added) Complete a serial number worksheet when an engine is inducted into maintenance and deliver to EM.
- 6.2.3.19.2.6.2. (Added) Ensure all documentation (serviceable tags or equivalent) applicable to new components are delivered to EM to be loaded in IMDS.
- 6.2.3.19.2.6.3. (Added) Complete all removal and installation actions in IMDS for serially controlled components / engines during in-shop and flight line maintenance and notify EM of any status changes no later than close of business the first duty day after the event. All engine washes and preservations on engines installed in aircraft will be monitored and loaded by the location that has Global Hawk aircraft. This is due to the unique frequency of the inspections depending on its location.
- 6.2.3.19.2.6.4. (Added) Appoint a highly qualified 2A671A technician or civilian equivalent possessing engine operation experience and knowledge in troubleshooting and repair procedures as deployed U-2 engine monitor. Appoint the most qualified 2A651A technician or civilian equivalent as the deployed engine monitor for the RQ-4.
- 6.2.3.19.4.1. (Added) Deployed engine monitors will:
- 6.2.3.19.4.1.1. (Added) Report to the EM in room 589, building 1086, NLT 10 days prior to deploying for a briefing conducted by the EM or assistant EM and will sign a Deployed Engine Monitor Letter.
- 6.2.3.19.4.1.2. (Added) Ensure all spare engines have an E407 (CEMS) product option 1 and 4 placed in the engine pouch.
- 6.2.3.19.4.1.3. (Added) Contact the home station EM office upon arrival at deployed location, supplying your deployed e-mail address, telephone and FAX number.
- 6.2.3.19.4.1.4. (Added) Report below information on all engine/component, time change item replacements and cannibalization actions to the home base EM office within 24 hours of the occurrence or prior to the next scheduled flight. During normal duty hours (0600-1600 Pacific Standard Time) e-mail 9MOS/MXOOE Engine Management. After normal duty hours contact the 9 MXG MOC or Command Post to be connected with EM personnel.

- 6.2.3.19.4.1.4.1. (Added) Date and time of engine/component removal or installation.
- 6.2.3.19.4.1.4.2. (Added) Reason for removal/How Mal Code. (Include discrepancy, be specific).
- 6.2.3.19.4.1.4.3. (Added) Engine serial number and component position number, including fly time and total time.
- 6.2.3.19.4.1.4.4. (Added) Report any and all parts changes, to include old serial number/part number removed and new serial number/part number installed and a brief narrative.
- 6.2.3.19.4.1.4.5. (Added) Disposition of engine to include transportation control number off the DD Form 1348-1/1A shipping document. Coordinate with supply and transportation to assure engine is shipped properly and promptly.
- 6.2.3.19.4.1.4.6. (Added) Follow the EM plan developed by the EM office for all scheduled engine changes.
- 6.2.6.3. Update the Maintenance Performance Indicators slide 1 hour prior to the MXG Stand-up.
- 6.2.6.16.4.1.2. (Added) Maintain DD forms 2875, System Access Authorization Request.
- 6.2.6.16.4.1.2.1. (Added) Issue a user-ID and terminal-ID, (a profile name will be added to his account.)
- 6.2.6.16.4.4.1. (Added) Update the following memos yearly or when there's a new DBM, whichever comes first:
- 6.2.6.16.4.4.1.1. (Added) Alternate Information Assurance Officer appointment letter for Site Management access.
- 6.2.6.16.4.4.1.2. (Added) Terminal Area Security Officer appointment letter for automated reset program access.
- 6.2.6.16.4.4.1.3. (Added) Unlimited Access to database editor, database queries, EZload and termrun\$ interface letter.
- 6.2.6.16.4.5.1. (Added) Perform user-ID audit every six months.
- 6.2.6.16.4.6.1. (Added) Maintain and control Terminal IDs.
- 6.2.6.16.4.6.2. (Added) A terminal-ID is required to activate an IMDS. It will be issued to each IMDS terminal.

- 6.2.6.16.4.8.1.1. IMDS Downtime: DBM will notify all affected IMDS users of scheduled and unscheduled IMDS outages.
- 6.2.6.16.4.8.1.2. DBM will provide as much information as possible for unscheduled downtimes.
- 6.2.6.16.4.8.1.3. Work centers are responsible for implementing manual documentation procedures during these outages.
- 6.2.6.16.4.8.2.1. Manual procedures for IMDS updates during system outages.
- 6.2.6.16.4.8.2.1.1. All procedures for manual update of IMDS products apply to both home station and deployed locations.
- 6.2.6.16.4.8.2.1.2. See Attachment 24 for manual Job Control Numbers (JCN) block assignment. These JCNs are established only for manual input of JCNs during IMDS outages and deployment processing.
- 6.2.6.16.4.8.2.1.2. All work centers that use IMDS products will annotate current products by lining through old data and writing changes in red as they occur until new products are available. New products will be verified to ensure all changes were updated correctly in IMDS before disposing of old products. Units may keep an electronic version of the most recent MIS products as a back-up plan.
- 6.2.6.16.4.8.2.1.3. Work centers will use AFTO Form 349s, locally produced Maintenance Data Collection utilities, AF Form 1530 and preprinted IMDS screens to preserve data during periods of IMDS outages.
- 6.2.6.16.4.9.1. (Added) Generate runstream at the beginning of the every month.
- 6.2.6.16.4.9.1.1. (Added) Save the Monthly Man-hour Summary Report.
- 6.2.6.16.4.9.1.2. (Added) Send the TCTO report for Lockheed Martin to mailto:lockheed@beale.af.mil.
- 6.2.6.16.4.9.1.3. (Added) Delete holding queues.
- 6.2.6.16.4.21. (Added) DBM Mailbox: mailto:9MOSIMDS@beale.af.mil.
- 6.2.6.16.5.12. (Added) TRIC/Profile access letters (or emails) will be submitted through the applicable IMDS subsystem manager for approval and forward to IMDS DBM section.
- 6.2.6.16.5.13. (Added) Letters must include the name, employee number, individual user ID, profile and/or TRIC code requested, and signature of individual's supervisor.

- 6.2.6.16.5.14. (Added) TRIC/Profile letters are filed by the DBM section and require updating annually.
- 6.2.6.16.6.9. (Added) DIT operations.
- 6.2.6.16.6.9.1. (Added) The IMDS Maintenance Action Review background reports will be formatted into an Excel spreadsheet and placed into each squadron's respective folder, by 1000 hours every duty day.
- 6.2.6.16.6.9.2. (Added) All off-station reviews will be forwarded to the respective organization electronically through a permanent e-mail account on a daily basis, and must be returned to this office for follow-up and inclusion into historical documents every Thursday.
- 6.2.6.16.6.9.3. (Added) On-station personnel perform reviews through the MOC Public Access folder on the Maintenance Group shared drive.
- 6.2.6.16.6.9.3.1. (Added) It is mandatory that this process be performed on a daily basis.
- 6.2.6.16.6.9.3.2. (Added) DIT monitors will audit the spreadsheet for errors and forward this information to the applicable work centers for corrections.
- 6.2.6.16.6.10. (Added) If shared drive problems occur for extended periods of time, the IMDS DBM section will print out the maintenance action review reports for all squadron DIT monitors.
- 6.2.6.16.6.10.1. (Added) These reports can be picked up at MMA.
- 6.2.6.16.6.10.2. (Added) The DIT monitors will add all corrected data to the applicable DIT worksheet for verification purposes.
- 6.2.6.16.6.11. (Added) These specific categories must be verified for accuracy. However, this list is not all-inclusive: How Malfunction Codes, Action Taken Codes, Work Unit Codes, Overlapping Time, Type Maintenance Codes, When Discovered Codes, Start and Stop Date/Time, Units Produced and Discrepancy/Corrective Action Narratives. Ensure Corrective Action has IAW and IPI's included.
- 6.2.6.16.6.12. (Added) Count and record each job control number WCE as one maintenance action evaluated.
- 6.2.6.16.6.12.1. (Added) Each WCE that has at least one error, counts as one WCE error. A single WCE may have multiple errors in it, but it only counts as one WCE error.
- 6.2.6.16.6.12.2. (Added) Annotate the total number of maintenance actions, types of errors, and corrected errors for each unit, in the DIT datasheet for that unit.

- 6.2.6.16.6.12.3. (Added) Types of errors will show the breakdown of any/all errors found, not the amount of WCEs with errors. Initial error rate calculation is automatic in the datasheet using the following criteria: (Errors divided by DDRs Evaluated) X 100 = Error Rate
- 6.2.6.16.6.13. (Added) Reports and briefings.
- 6.2.6.16.6.13.1. (Added) Senior leadership will be briefed weekly and quarterly on current error rates and problem areas as required.
- 6.2.6.16.6.13.2. (Added) DIT results will be created in a power point presentation for 9 MXG.
- 6.2.6.16.6.13.3. (Added) A database of initial and corrected error rates will be maintained in Maintenance Data Systems Analysis for each organization.
- 6.2.6.16.7. (Added) DIT composition. All units will establish a DIT. Names of designated DIT/DIG personnel will be provided in writing to MMA.
- 6.2.6.16.8. (Added) DIT monitors will inform MMA of any changes in status such as primary/alternate DIT monitor is TDY, on leave or PCS/PCA.
- 6.2.6.16.9. (Added) DIT monitors will be trained by Deficiency Analysis at home station and personnel going TDY to replace DIT monitors in forward operation locations.
- 6.2.6.16.10. (Added) Each DIT monitor will maintain a continuity binder.
- 6.2.6.16.10.1. (Added) In the event both primary/secondary monitors are not available due to deployment, leave or other circumstances, the continuity binder should cover the basic requirements of the DIT program. It should include, but not necessarily be limited to appointment letter(s), DIT POCs and phone numbers, a printed copy of the current DIT Unit Tracking Spreadsheet, the DIT Training Guide and web Addresses for this operating instruction, T.O. 00-20-1, T.O. 00-20-2, AFI 21-101, AFI 21-101, CAF SUP1
- 6.2.7.8. (Added) Out-processing personnel for deployment on the 380 ERS and 1 ERS. DBM will:
- 6.2.7.8.1. (Added) Load JDD authorization using screen 340.
- 6.2.7.8.2. (Added) Perform JDD authorization audit every quarter. To obtain the list of deployed personnel, the link is found on the continuity book.
- 6.2.7.8.3. (Added) Remove JDD authorization, use screen 340.
- 6.4.3. See Para 14.45. for SAV responsibilities to 9 RW FOLs.
- 7.1.7. All TCTO managing sections will have a sample TCTO folder that will mirror the master folder filed in MOF PS&D.

- 7.1.8.1. (Added) MOC will notify QA and MOF PS&D of the aircraft tail number, type mishap, location and time of mishap.
- 7.1.8.2. (Added) Provide IMDS screens #700, #380 option 6 with supply data, # 726 option U, #525 with imbedded parts, #713, #393 for all inputs and 396 (PRA), #329 and a #123 (Maintenance History) to QA.
- 7.1.8.3. (Added) Inform Engine Management of incident. If required, retrieve engine records.
- 7.1.8.4. (Added) Collect all aircraft AFTO Forms 781 not filed in jacket file.
- 7.1.8.5. (Added) Deliver aircraft jacket file, decentralized records and all other aircraft records to QA.
- 7.1.8.6. (Added) QA will ensure all records are isolated from access by unauthorized personnel until relieved by higher authority.
- 7.1.10.2. (Added) The Depot Deferred worksheet (MXG Form 2) will be initiated by PS&D section once the preliminary decision has been made to defer a discrepancy to depot.
- 7.1.10.3. (Added) The assigned AMU dedicated crew chief or designated alternate will coordinate PS&D and the section responsible for that system to initiate the depot deferred worksheet routing process. Once PS&D has initiated the form, the work center supervisor will validate the non-grounding condition and will concur/non-concur on the worksheet and forward to the first approving authority.
- 7.1.10.4. (Added) A Lockheed-Martin, Northrop Grumman Corporation, Raytheon El Segundo, Raytheon Falls Church or L-3 Communications contracted field service representative, (as required) will verify the discrepancy in beyond field level repair capability. They will concur/non-concur with an explanation of non-concurrence.
- 7.1.10.5. (Added) The squadron operations officer/superintendent will concur/no concur with the deferment.
- 7.1.10.6. (Added) Quality Assurance, as the program manager, will verify if the discrepancy meets the criteria of a depot deferred discrepancy. For FOL locations, QA will send email notification to 9 MXG QA for informational purposes.
- 7.1.10.7. (Added) Final approval authority will be with the 9 MXG/CC/CD/CEM or FOL equivalent unless the depot deferred discrepancy was directed by the TO 00-25-107 process.
- 7.1.10.8. (Added) The completed worksheet will be sent back to the PS&D section where the original discrepancy will be transferred to the AFTO Form 781K, performing work center will be transferred to depot, and the worksheet will be filed in the aircraft jacket file.
- 7.2.1.3.1. Including FOLs to ensure aircraft forms are current and complete.

- 7.2.1.3.1.1. (Added) The review will be performed by PS&D, Engine Management, flight/section chief, aircraft crew chief, NDI for oil analysis and AMU supply section.
- 7.2.1.3.1.2. (Added) Initiate a job control number for the ADR for each aircraft and add it to the weekly operation and maintenance schedule.
- 7.2.1.3.1.3. (Added) Create an ADR work package that will include the following IMDS screens: 700, 701 (for hourly and dated inspections and time changes) 380 option #6 with supply data, 713 option #1, 525 option #4 with embedded parts, 329, and 726 (dating back to last DR).
- 7.2.1.3.1.4. (Added) Validate airframe operating time, time remaining to inspection, time remaining to time change replacement, and ensure all preventive maintenance type events are annotated correctly.
- 7.2.1.3.1.5. (Added) Verify OAP entries with NDI section.
- 7.2.1.3.1.6 (Added) Coordinate with Engine Management for inspection due times and to ensure engine related flying hours and cycles are correct.
- 7.2.1.3.1.7. (Added) Process IMDS suspense validation to update the next due date of the ADR and file document review package in the applicable APG section.
- 7.2.1.3.1.8. (Added) Deployed/forward operating location schedulers will follow the above requirements and verify TCI due-in status with deployed supply personnel by verifying AFTO Form 2005 and document number has been submitted for each TCI. For on-hand TCIs and TCTO kits, deployed schedulers will physically verify status and location.
- 7.2.1.3.1.9. (Added) Maintain Depot Deferred Worksheet (MXG Form 2) and initiate during each aircraft document review. Maintain completed depot deferred maintenance checklist in jacket file.
- 7.2.1.3.1.10. (Added) Verify AFTO 95 items in IMDS using screen 810. For those parts that are missing, create a job control number using screen 73 with the applicable 95 WUC annotating physical verification required and part number/serial number installed in IMDS.
- 7.2.1.3.1.11. (Added) Verify all TCTOs are entered on the AFTO Form 781K IAW T.O. 00-20-1.
- 7.2.1.3.1.12. (Added) Verify all entries on the front of the AFTO Form 781K are made IAW T.O. 00-20-1.
- 7.2.1.3.1.13. (Added) Ensure crew chief creates an entry for aircraft document review requirement in AFTO Form 781A.
- 7.2.1.3.1.14. (Added) Ensure crew chief annotates compliance for the aircraft document review n

AFTO Form 781A and in the MIS.

- 7.2.1.3.1.15. (Added) Flight line supply support will compare and validate all requisitions in the Standard Base Supply System (SBSS) against the requisitions in the aircraft forms. Correct all SBSS disparities using IMDS screen # 499. For deployed aircraft, the supply support will verify AFTO 2005 due in status and on hand status of requisitions.
- 7.2.1.3.1.16. (Added) NDI shop will verify OAP information contained on the DD Form 2027, Oil Analysis Record (or automated record) with PS&D section, deployed scheduler or the aircraft crew chief who is accomplishing the DR.
- 7.2.1.3.1.17. (Added) Engine Management will coordinate with PS&D to validate and correct engine related inspection due times, time change due times, flying hours and cycles.
- 7.2.1.3.1.18. (Added) The crew chief will ensure PS&D is the last stop in the document review process.
- 7.2.2.1.5. Pre-dock and Post-dock meetings for U-2 will also include QA, Engine Management, and specific system specialists or equivalent positions at forward locations. Pre dock and Post dock meetings for RQ-4 will include appropriate AMU supervision, QA, and Engine Management.
- 7.2.2.1.5.1. (Added) RQ-4 Pre dock and Post dock meetings meetings will be documented using an AF Form 2410 for all aircraft requiring 50 or 75 flight NDI inspections IAW AFI 21-101 Para 7.14.3 and 7.14.4.
- 7.2.2.1.5.2. (Added) Pre-dock and Post-dock meetings for T-38 will be accomplished with T-38 scheduler, Holloman AFB scheduler, M1 Support Services supervision and the T-38 Quality Assurance Evaluator.
- 7.2.2.1.8. (Added) Provide inspection dock chief with aircraft configuration table from MSAT at pre-dock meeting.
- 7.2.2.1.9. (Added) Once received from dock chief after post dock, maintain configuration report with corrections if required until next aircraft inspection.
- 7.2.2.1.10. (Added) Along with the procedures in this instruction, reconcile IMDS screen 810 with the aircraft standard from MSAT and forward to inspection dock chief at pre-dock to physically verify part numbers and serial numbers of tracked items as required.
- 7.2.2.1.11. (Added) Forward standardized part number/serial number verification checklist to inspection dock at pre-dock meeting.
- 7.2.2.1.12. (Added) Once the documents have been received from the dock chief at the post dock, reconcile with IMDS using screen 810 in IMDS to verify any configuration discrepancies are corrected and maintain in aircraft jacket file.

- 7.2.2.1.13. (Added) Inspection dock will physically verify all parts required by the checklist and the provided MSAT configuration table.
- 7.2.2.1.14. (Added) Return products to PS&D section with corrections made IAW AFI 21-101 and this instruction.
- 7.2.4.7. (Added) Establish MSAT configurations for all assigned aircraft.
- 7.2.4.8. (Added) Process the Generic Configuration Status and Accounting Subsystem error corrections daily.
- 7.2.4.9. (Added) Provide dedicated PS&D scheduler MSAT audit of aircraft periodic inspections.
- 7.2.4.5.1. (Added) The performing workcenter will load, install and remove all applicable tracked equipment in IMDS for work performed by using screens 42 (established record) and screen 907 (time taken/removal of old item). Only approved part numbers, the exact quantity per assembly and the correct next higher assembly relationship identified by work unit code will be loaded and installed in IMDS.
- 7.2.4.5.2. (Added) IMDS screen 42 override option will not be used without prior MOF PS&D coordination.
- 7.2.4.5.3. (Added) Ensure proper installed-on-chain relationship between part/serial numbers and the next higher assembly in IMDS.
- 7.2.4.5.4. (Added) Order, manage and dispose of HAZMAT items for applicable TCIs utilizing the cradle-to-grave methodology. The requisition number will be forwarded to the applicable PS&D section for follow-up action.
- 7.2.4.5.5. (Added) Request IMDS screen access by letter from applicable IMDS sub system manager from MOF PS&D for access to any TCI or SI subsystem screens needed. Letter must state reason for needed access, name of individual, rank, office symbol, user ID, employee number, work center, and profile (TRIC and option requested).
- 7.2.6.2.1.2.1 (Added) Provide a weight and balance letter on all TCTO's stating that the TCTO has been reviewed by the weight and balance manager.
- 7.2.6.2.3.6.1. (Added) The using organization or back shop requiring HAZMAT items for TCTOs will order, manage and dispose of the material utilizing the cradle-to-grave methodology per established HAZ Mart policies. Forward the document numbers and requisition numbers to MOF PS&D NLT 3 duty days after request.
- 7.2.7.2.1.1. (Added) Send a list of overdue and out of configuration TCIs to applicable scheduler NLT 1000 first duty day of each week using MSAT.
- 7.2.7.2.1.2. (Added) Provide slide reflecting overdue, uncorrected or out of configuration TCIs to

- MXG/CC NLT last duty day of current week.
- 7.2.7.2.1.3. (Added) Forecast and order TCIs using procedures in AFI 21-101, T.O. 00-20-9 and all relevant supplements.
- 7.2.7.2.1.4. (Added) Create and defer a JCN using applicable JST in IMDS.
- 7.2.7.2.1.5. (Added) Order non-CAD/PAD items using SBSS.
- 7.2.7.2.1.6. (Added) Verify removed part is deleted from IMDS. Dedicated scheduler provides response to MOF PS&D for quarterly TCI and SI audit by close of business the day of the suspense. Reponses must include corrective action of discrepancies found during the audit.
- 7.2.7.2.1.7. (Added) Order and manage HAZMAT items for applicable TCIs utilizing the cradle-to-grave methodology. The requisition number will be forwarded to the dedicated PS&D section for follow-up action.
- 7.2.7.3.1.1. (Added) Manage, track and schedule all engine related TCIs, TCTOs and inspections.
- 7.2.7.3.1.2. (Added) Provide MOF PS&D with a list of all TCIs coming due within 400 hours.
- 7.2.7.3.1.3. (Added) Provide MOF PS&D a copy of the Engine Management plan and forecast monthly.
- 7.2.7.8.1. (Added) MOF PS&D or OL scheduler must process IMDS screen 128 for all removal, installation, SI, TCI and TCTO compliance updates for any items.
- 7.2.7.8.2. (Added) Engine Management must process IMDS screen 128 for engine components, removal/installs, SI, TCI and TCTO compliance.
- 7.2.7.8.3. (Added) Personnel that require scheduling screens to process IMDS screens 128 suspenses, 45/46 removal and installs must request IMDS screen access and receive proper training through MOF PS&D.
- 7.2.7.9.1. (Added) AFE will:
- 7.2.7.9.1.1. (Added) Perform a 100% inventory and validation of all items to ensure IMDS approved configuration items match the actual configuration during acceptance inspections.
- 7.2.7.9.1.2. (Added) As a minimum, verify the accuracy of the part number, serial number, work unit code, quantity, due date, DOM, DOI and lot number.
- 7.2.7.9.1.3. (Added) Assist AMU PS&D in correcting all configuration errors.
- 7.2.7.13. (Added) The 9 PSPTS Operations Flight will:

- 7.2.7.13.1. (Added) Perform a 100% inventory and validation of all life support items to ensure ALSMS approved configuration items match the actual configuration.
- 7.2.7.13.2. (Added) As a minimum, verify the accuracy of the part number, serial number, work unit code, quantity, due date, DOM, DOI and lot number.
- 7.2.7.13.3. (Added) Load new AFE equipment items in ALSMS as replacement occur.
- 7.2.7.13.4. (Added) Provide ALSMS printout to AFE section with each personnel parachute delivered for maintenance.
- 7.2.10.1. (Added) Acceptance inspections will be performed on U-2 aircraft per the directions of higher headquarters. Quality Assurance will update the master weight and balance record for aircraft returning from depot maintenance.
- 7.2.10.2. (Added) Acceptance inspections will be accomplished on RQ-4 aircraft, RD2-A MCE and RD2-B LRE immediately after delivery from the factory, another unit, programmed depot maintenance, or contract field team maintenance when possession is transferred to the team.
- 7.2.10.3. (Added) Acceptance inspections will be accomplished prior to any maintenance actions, other than those required to safe the aircraft or pilot-reported discrepancies that would not hinder the validation of the acceptance inspection.
- 7.2.10.4. (Added) Transfer inspection checks will be accomplished IAW T.O. 00-20-1, the applicable mission design series T.O. and this instruction.
- 7.2.10.5. (Added) Transfer requirements when an aircraft is transferred to another unit will be negotiated between the gaining/losing units.
- 7.2.11.1.1.1 (Added) In addition to the requirements of T.O. 00-20-1 and AFI 21-101, performing work centers will ensure PS&D receives AFTO Form 95 for new equipment that require AFTO Form 95 IAW applicable -6 T.O.
- 7.2.11.1.1.2. (Added) PS&D will initiate an IMDS Automated History Event upon receipt of all new equipment requiring an AFTO Form 95.
- 7.2.11.1.1.3. (Added) PS&D will:
- 7.2.11.1.3.1. (Added) Develop a local JST for aircraft and equipment transfer and acceptance inspections in conjunction with quality assurance.
- 7.2.11.1.1.3.2. (Added) This JST must meet all T.O. 00-20-1, T.O. 2-1-18 and applicable aircraft Dash-6 and Dash-21 T.O. requirements, as well as AFI 21-103 and MAJCOM specific transfer requirements.

- 7.2.11.1.3.3. (Added) Include historical records (e.g., NDI records, egress records, weight and balance records, oil analysis program records, strut records) and other items listed below.
- 7.2.11.1.3.4. (Added) Notify the MOC, MDS and applicable AMU representative when there is an aircraft gain, loss, or position identifier change due to aircraft transfer, acceptance, or DFT/CFT work is accomplished IAW TO 00-25-107 request.
- 7.2.11.1.2. Jacket files will accompany aircraft deployed for 120 days or more.
- 7.2.11.1.2.1. (Added) Review historical documentation, (MXG Form 3) as well as AFTO Form 95's, AFTO Form 781 A/H/J/K's, and major inspection packages.
- 7.2.11.1.2.2. (Added) Ensure the AFTO Form 95 binder, current ARC, SHD printed or saved on a disk, AHE printed or saved on a disk and PRA printed or saved on a disk to include special inspections and time change items are sent with the aircraft for T-38 aircraft phase input.
- 7.2.11.1.2.3. (Added) Schedule an acceptance inspection JST in IMDS for aircraft, LRE and MCE.
- 7.2.11.1.2.4. (Added) Load TCTO AFTO Form 95 into IMDS.
- 7.2.11.1.3. Document all findings on the Aircraft Annual Decentralized Records Review Checklist, (MXG Form 4). Electronic copies of the checklists are located in the PS&D shared drive. Provide maintaining work centers with a list of all errors discovered during reviews.
- 7.2.11.1.3.1. (Added) Maintaining work centers will:
- 7.2.11.1.3.1.1. (Added) Ensure records are available during decentralized records review.
- 7.2.11.1.3.1.2. (Added) Correct all errors discovered during records review NLT next duty day.
- 7.2.11.1.3.1.3. (Added) Provide applicable PS&D section a statement of corrective actions.
- 7.2.11.1.3.1.4. (Added) Review delivered jacket file; verify all documentation is included and distribute to the appropriate work centers.
- 7.2.11.1.3.1.5. (Added) Update line replaceable unit AFTO Forms 95 in IMDS.
- 7.2.11.1.3.1.6. (Added) Perform document review for aircraft, LRE and MCE.
- 7.2.11.1.3.1.7. (Added) MXS Engine Shop will:
- 7.2.11.1.3.1.8. (Added) Perform general visual inspection of engine IAW with applicable T.O..
- 7.2.11.1.3.1.9. (Added) Complete engine serially controlled item checklist and return checklist to Engine Management.

- 7.2.11.1.3.1.10. (Added) Perform a 7-level visual engine inspection.
- 7.2.11.1.4.1. (Added) Develop and maintain missing AFTO Forms 781 letter for all PS&D sections.
- 7.2.11.1.4.2. (Added) Track missing AFTO Forms 781 using 3 copies of the missing forms letters, (MXG Form 5).
- 7.2.11.1.4.3. (Added) One letter goes to the appropriate section chief.
- 7.2.11.1.4.4. (Added) One letter goes into the aircraft jacket file in place of the missing forms.
- 7.2.11.1.4.5. (Added) One letter stays with the scheduler for tracking the 5-duty-day suspense.
- 7.2.11.1.4.6. (Added) When 781 forms are found, file in appropriate jacket file, remove and dispose of missing forms letter.
- 7.2.11.1.6. (Added) Maintain current copy of all appointment letters for dash 21 equipment custodians.
- 7.2.11.1.7. (Added) File copy of AF Form 2692s in applicable aircraft jacket file.
- 7.2.11.1.8. (Added) MXG/QA will:
- 7.2.11.1.8.1. (Added) Work with PS&D to develop an acceptance JST.
- 7.2.11.1.8.2. (Added) Perform a follow-up QVI of the engine inspection performed by engine shop.
- 7.2.11.1.8.3 (Added) Perform a basic post flight QVI (aircraft only).
- 7.2.11.1.8.4. (Added) Perform acceptance inspection follow-up and validate configuration management data (LRE and MCE).
- 7.2.11.1.9. (Added) AMU officer in charge/superintendent will:
- 7.2.11.1.9.1. (Added) Coordinate with the dedicated crew chief, engine shop, Air Force Engineering and Technical Services, field service representatives, and QA to review all discrepancies discovered.
- 7.2.11.1.9.2. (Added) Forward the draft Acceptance Inspection Deficiency Report (AIDR), if required, to the Product Improvement Office within 5 days of acceptance inspection completion.
- 7.2.11.1.9.3. (Added) Ensure maintenance personnel strictly adhere to and accomplish all requirements shown in **Attachment 21** when accepting RQ-4 aircraft on initial delivery from the manufacturer, **Attachment 22** when accepting RD-2A MCEs and **Attachment 23** when

- accepting RD-2B LREs.
- 7.2.11.1.10. (Added) The 9 MXG Product Improvement Manager will submit the AIDR to ACC within 15 days of the acceptance inspection completion.
- 7.10.7.4.1. (Added) Send reconciliation of overdue/missing inspections/TCIs from MSAT by aircraft NLT 1000 on the first day of the week for applicable aircraft to dedicated scheduler with a 5-duty-day suspense.
- 7.10.7.4.2. (Added) When corrective action is received, document changes to aircraft PRA, print new MSAT report and maintain until next quarterly review.
- 7.10.7.4.3. (Added) Dedicated scheduler will inspect reconciliation and make corrections in IMDS and applicable MIS products.
- 7.10.7.4.4. (Added) Dedicated scheduler will return reconciliation to MOF PS&D within 5 duty days with written corrective action.
- 7.10.7.4.5. (Added) Dedicated scheduler must verify corrected discrepancies in IMDS and provide response to MOF PS&D for Quarterly TCI and SI audit by COB 5 duty days after response has been initiated. Responses must include corrective action of discrepancies found during the audit.
- 7.10.7.5. (Added) Special Inspection Procedures.
- 7.10.7.5.1. (Added) Send a list of overdue and missing inspections to applicable scheduler NLT 1000 first duty day of each week using MSAT.
- 7.10.7.5.2. (Added) Provide slide reflecting overdue, uncorrected or missing inspection to MXG/CC NLT the last duty day of current week.
- 7.10.7.5.3. (Added) Maintain MXG/CC approved aircraft under fly/overfly authorization letter.
- 7.10.7.5.4. (Added) Performing workcenters to include egress, survival equipment, PSPTS will take time to complete work orders using applicable JST's to update IMDS.
- 7.10.13.1. (Added) Meetings are held 1st and 3rd Friday of each month with all agencies to monitor aircraft utilization and maintenance resources to ensure wing programs and commitments are met and that shared resources and schedules are deconflicted to cover requirements within the current month.
- 7.10.13.2. (Added) As a minimum, the following agencies are required to attend: U-2 scheduler, RQ-4 scheduler, T-38 scheduler, survival equipment, Egress & Det 15 of the 373d Training Squadron.
- 7.10.13.3. (Added) Ensure aircraft and equipment are scheduled to meet all training needs.

- 7.10.13.4. (Added) Review weekly and monthly training schedules prior to publication to minimize impact on production and facilities.
- 7.10.14.1. (Added) Check previous days scheduled maintenance daily NLT 0900.
- 7.10.14.2. (Added) Print uncompleted snapshots (screen 122) of the job and file with the applicable weekly schedule.
- 7.10.14.3. (Added) On Monday, NLT 0900, PS&D will email dedicated AMU scheduler the MSE calculations.
- 7.10.14.4. (Added) Dedicated AMU scheduler will reply with response on missed scheduled maintenance for previous week NLT 1200.
- 7.10.14.5. (Added) PS&D will resend dedicated AMU scheduler a final copy of MSE with percentage and responses.
- 7.10.14.6. (Added) Dedicated AMU scheduler will inform AMU supervision of previous weeks MSE.
- 7.12.8. (Added) Aircraft Over-/Under-Fly Authorization Procedures.
- 7.12.8.1. (Added) The 9 MXG/CC is the approval authority to under or over-fly periodic inspection time by no greater than 20 hours IAW T.O. 1U-2S-6. All under- and over-fly approvals will be information copied to HQ ACC, 12 AF and WR-ALC/LX.
- 7.12.8.2. (Added) Under or over fly requests in excess of 20 hours must be coordinated through 9 MXG/CC, HQ ACC and 12 AF. WR-ALC/LX is the final approval authority for requests in excess of 20 hours.
- 7.12.8.3. (Added) All requests to under- or over-fly periodic inspections fly will be submitted in writing by aircraft maintenance units to 9 MOS/MXOOP. 9 MOS/MXOOP will forward the request to 9 MXG/CC for coordination and approval, then forward request to HQ ACC, 12 AF, and WR-ALC/LX as appropriate. E-mail or telecom requests will not be accepted.
- 7.13. (Added) Local Flying Hour Accounting Procedures.
- 7.13.1. (Added) Tracking, reconciling and reporting the flying hour program is the responsibility of the AVUM. Guidance for completing AFTO form 781 can be found in T.O. 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies, and procedures, AFI 11-401, *Flight Management*, AFI 21-101, *Aerospace Equipment Management*, and this instruction.
- 7.13.1.2. (Added). Maintenance Data Systems Analysis (MDSA) will:

- 7.13.1.3. (Added) Provide PS&D an electronic copy of previous days Accomplishment Utilization Report (AUR) daily and monthly for each AMU NLT the first duty day of the following month and as requested.
- 7.13.2. (Added) PS&D will:
- 7.13.2.1. (Added) Save a copy of previous days AUR daily.
- 7.13.2.2. (Added) Send AUR to AVUM, OSS Current Operations, Debrief, Wing Operations Scheduling Office, and Aviation Resource Management NLT 0900 the following day for reconciliation.
- 7.13.2.3. (Added) In conjunction with OSS AVUM, ensure all discrepancies between MIS and the AFTO Forms 781 are corrected prior to submission.
- 7.13.2.4. (Added) In conjunction with OSS AVUM compare the flying hours in the MIS with flying hours in ARMS monthly to ensure the data in the MIS represents hours flown.
- 7.13.3. (Added) AVUM will:
- 7.13.3.1. (Added) Obtain previous days daily AUR from PS&D.
- 7.13.3.2. (Added) Forward copy of previous days AUR to AMU debrief and Squadron Aviation Resource Management (SARM) for flying hour verification. Debriefing sections and SARM monitors will reconcile all sorties and hours flown on the AUR and return a signed copy to the OSS AVUM. If a disparity exists, the de-briefer or SARM monitor will annotate the difference on the AUR with the de-briefer correcting the MIS and notifying AMU PS&D of corrections.
- 7.13.3.3. (Added) Obtain reconciled signed copy of daily AUR from AMU debrief and SARM for previous days flying NLT 1000 hours the next duty day. The OSS AVUM will verify corrections were made in the MIS using AUR. If corrections were not made, the OSS AVUM will coordinate with MOF PS&D flight for appropriate action.
- 7.13.3.4. (Added) File daily AUR until replaced by signed monthly AUR.
- 7.13.3.5. (Added) Obtain a monthly cumulative AUR from PS&D. Forward copy to AMU debrief and SARM for flying hour verification.
- 7.13.3.6. (Added) Obtain reconciled signed copy of cumulative AUR from AMU debrief and SARM sorties and hours flown and maintain until monthly report is obtained.
- 7.13.3.7. (Added) Ensure all sorties and hours flown are reconciled monthly by the 4th day of the following month IAW this instruction and chapter 2 of AFI 21-103.
- 7.13.3.8. (Added) File monthly AUR for one year.

- 7.14. (Added) Manual Procedures for IMDS Updates during System Downtime.
- 7.14.1. (Added) All procedures for manual update of IMDS products apply to both home station and deployed locations.
- 7.14.2. (Added) See **Attachment 24** for manual JCN block assignment. These JCNs are established only for manual input of JCNs during IMDS downtime and deployment processing.
- 7.14.3. (Added) All work centers that use IMDS products will manually update all IMDS products by lining through old data and writing changes in red as they occur until new products are received. New products will be verified to ensure all changes were updated correctly in IMDS before disposing of old products. Units may keep an electronic version of the most recent MIS products as a back-up plan for when MSAT is unavailable for more than 48 hours.
- 7.15. Static Display Aircraft Request Requirements.
- 7.15.1. (Added) All requests must be made no later than 2 weeks prior to the required date. Other requests will be treated as an exception to policy and will be handled as they occur.
- 7.15.2. (Added) Static displays should only be on Fridays, in dock 6, from 0730-1530.
- 7.15.3. (Added) Static display requirements will be discussed at the Shared Resources meeting. Requests for T-38, U-2 and RQ-4 aircraft will be coordinated through 9 MOS/MXOOP.
- 7.15.4. (Added) PS&D will obtain approval or non-approval from the appropriate aircraft maintenance unit and notify the requester.
- 7.15.5. (Added) PS&D will obtain 9 MXG/CC approval and have the static display reflected in the weekly schedule.
- 7.15.6. (Added) All requests will be submitted via Static Display Request, (<u>Attachment 39</u>) and will be forward to 9 MOS PS&D via e-mail to 9mos.mxoop@beale.af.mil or faxed to 4-8652 for coordination.
- 7.15.7. (Added) Sponsor/requestors are responsible for ensuring all tour participants meet minimum security requirements to be in close proximity of operational aircraft.
- 7.15.8. (Added) Sponsor/requestors are responsible for the safety and security of their guests at all times while viewing aircraft and will not leave them unescorted in the area. Photography is only permitted as outlined in the Beale AFB Installation Security Instruction. Photography of sensor-configured aircraft is strictly forbidden.
- 7.1.7. All TCTO managing sections will have a sample TCTO folder that will mirror the master folder filed in MOF PS&D.
- 7.1.8.1 (Added) MOC will notify QA and MOF PS&D of the aircraft tail number, type mishap, location and time of mishap.
- 7.1.8.2. (Added) Provide IMDS screens #700, #380 option 6 with supply data, #726 option U, #525 with imbedded parts, #713, #393 for all inputs and 396 (PRA), #329 and a #123

- (Maintenance History) to QA.
- 7.1.8.3. (Added) Inform Engine Management of incident. If required, retrieve engine records.
- 7.1.8.4. (Added) Collect all aircraft AFTO Forms 781 not filed in jacket file.
- 7.1.8.5. (Added) Deliver aircraft jacket file, decentralized records and all other aircraft records to QA.
- 7.1.8.6. (Added) QA will ensure all records are isolated from access by unauthorized personnel until relieved by higher authority.
- 7.1.10.2. (Added) The Depot Deferred worksheet (MXG Form 2) will be initiated by PS&D section once the preliminary decision has been made to defer a discrepancy to depot.
- 7.1.10.3. (Added) The assigned AMU dedicated crew chief or designated alternate will coordinate PS&D and the section responsible for that system to initiate the depot deferred worksheet routing process. Once PS&D has initiated the form, the work center supervisor will validate the non-grounding condition and will concur/non-concur on the worksheet and forward to the first approving authority.
- 7.1.10.4. (Added) A Lockheed-Martin, Northrop Grumman Corporation, Raytheon El Segundo, Raytheon Falls Church or L-3 Communications contracted field service representative, (as required) will verify the discrepancy in beyond field level repair capability. They will concur/non-concur with an explanation of non-concurrence.
- 7.1.10.5. (Added) The squadron operations officer/superintendent will concur/no concur with the deferment.
- 7.1.10.6. (Added) Quality Assurance, as the program manager, will verify if the discrepancy meets the criteria of a depot deferred discrepancy. For FOL locations, QA will send email notification to 9 MXG QA for informational purposes.
- 7.1.10.7. (Added) Final approval authority will be with the 9 MXG/CC/CD/CEM or FOL equivalent unless the depot deferred discrepancy was directed by the TO 00-25-107 process.
- 7.1.10.8. (Added) The completed worksheet will be sent back to the PS&D section where the original discrepancy will be transferred to the AFTO Form 781K, performing work center will be transferred to depot, and the worksheet will be filed in the aircraft jacket file.
- 7.2.1.3.1. Including FOLs to ensure aircraft forms are current and complete.
- 7.2.1.3.1.1. (Added) The review will be performed by PS&D, Engine Management, flight/section chief, aircraft crew chief, NDI for oil analysis and AMU supply section.
- 7.2.1.3.1.2. (Added) Initiate a job control number for the ADR for each aircraft and add it to the weekly operation and maintenance schedule.

- 7.2.1.3.1.3. (Added) Create an ADR work package that will include the following IMDS screens: 700, 701 (for hourly and dated inspections and time changes) 380 option #6 with supply data, 713 option #1, 525 option #4 with embedded parts, 329, and 726 (dating back to last DR).
- 7.2.1.3.1.4. (Added) Validate airframe operating time, time remaining to inspection, time remaining to time change replacement, and ensure all preventive maintenance type events are annotated correctly.
- 7.2.1.3.1.5. (Added) Verify OAP entries with NDI section.
- 7.2.1.3.1.6 (Added) Coordinate with Engine Management for inspection due times and to ensure engine related flying hours and cycles are correct.
- 7.2.1.3.1.7. (Added) Process IMDS suspense validation to update the next due date of the ADR and file document review package in the applicable APG section.
- 7.2.1.3.1.8. (Added) Deployed/forward operating location schedulers will follow the above requirements and verify TCI due-in status with deployed supply personnel by verifying AFTO Form 2005 and document number has been submitted for each TCI. For on-hand TCIs and TCTO kits, deployed schedulers will physically verify status and location.
- 7.2.1.3.1.9. (Added) Maintain Depot Deferred Worksheet (MXG Form 2) and initiate during each aircraft document review. Maintain completed depot deferred maintenance checklist in jacket file.
- 7.2.1.3.1.10. (Added) Verify AFTO 95 items in IMDS using screen 810. For those parts that are missing, create a job control number using screen 73 with the applicable 95 WUC annotating physical verification required and part number/serial number installed in IMDS.
- 7.2.1.3.1.11. (Added) Verify all TCTOs are entered on the AFTO Form 781K IAW T.O. 00-20-1.
- 7.2.1.3.1.12. (Added) Verify all entries on the front of the AFTO Form 781K are made IAW T.O. 00-20-1.
- 7.2.1.3.1.13. (Added) Ensure crew chief creates an entry for aircraft document review requirement in AFTO Form 781A.
- 7.2.1.3.1.14. (Added) Ensure crew chief annotates compliance for the aircraft document review n AFTO Form 781A and in the MIS.
- 7.2.1.3.1.15. (Added) Flight line supply support will compare and validate all requisitions in the Standard Base Supply System (SBSS) against the requisitions in the aircraft forms. Correct all SBSS disparities using IMDS screen # 499. For deployed aircraft, the supply support will verify AFTO 2005 due in status and on hand status of requisitions.

- 7.2.1.3.1.16. (Added) NDI shop will verify OAP information contained on the DD Form 2027, Oil Analysis Record (or automated record) with PS&D section, deployed scheduler or the aircraft crew chief who is accomplishing the DR.
- 7.2.1.3.1.17. (Added) Engine Management will coordinate with PS&D to validate and correct engine related inspection due times, time change due times, flying hours and cycles.
- 7.2.1.3.1.18. (Added) The crew chief will ensure PS&D is the last stop in the document review process.
- 7.2.2.1.5. Pre-dock and Post-dock meetings for U-2 will also include QA, Engine Management, and specific system specialists or equivalent positions at forward locations. Pre dock and Post dock meetings for RQ-4 will include appropriate AMU supervision, QA, and Engine Management.
- 7.2.2.1.5.1. (Added) RQ-4 Pre dock and Post dock meetings meetings will be documented using an AF Form 2410 for all aircraft requiring 50 or 75 flight NDI inspections IAW AFI 21-101 Para 7.14.3 and 7.14.4.
- 7.2.2.1.5.2. (Added) Pre-dock and Post-dock meetings for T-38 will be accomplished with T-38 scheduler, Holloman AFB scheduler, M1 Support Services supervision and the T-38 Quality Assurance Evaluator.
- 7.2.2.1.8. (Added) Provide inspection dock chief with aircraft configuration table from MSAT at pre-dock meeting.
- 7.2.2.1.9. (Added) Once received from dock chief after post dock, maintain configuration report with corrections if required until next aircraft inspection.
- 7.2.2.1.10. (Added) Along with the procedures in this instruction, reconcile IMDS screen 810 with the aircraft standard from MSAT and forward to inspection dock chief at pre-dock to physically verify part numbers and serial numbers of tracked items as required.
- 7.2.2.1.11. (Added) Forward standardized part number/serial number verification checklist to inspection dock at pre-dock meeting.
- 7.2.2.1.12. (Added) Once the documents have been received from the dock chief at the post dock, reconcile with IMDS using screen 810 in IMDS to verify any configuration discrepancies are corrected and maintain in aircraft jacket file.
- 7.2.2.1.13. (Added) Inspection dock will physically verify all parts required by the checklist and the provided MSAT configuration table.
- 7.2.2.1.14. (Added) Return products to PS&D section with corrections made IAW AFI 21-101 and this instruction.
- 7.2.4.7. (Added) Establish MSAT configurations for all assigned aircraft.

- 7.2.4.8. (Added) Process the Generic Configuration Status and Accounting Subsystem error corrections daily.
- 7.2.4.9. (Added) Provide dedicated PS&D scheduler MSAT audit of aircraft periodic inspections.
- 7.2.4.5.1. (Added) The performing workcenter will load, install and remove all applicable tracked equipment in IMDS for work performed by using screens 42 (established record) and screen 907 (time taken/removal of old item). Only approved part numbers, the exact quantity per assembly and the correct next higher assembly relationship identified by work unit code will be loaded and installed in IMDS.
- 7.2.4.5.2. (Added) IMDS screen 42 override option will not be used without prior MOF PS&D coordination.
- 7.2.4.5.3. (Added) Ensure proper installed-on-chain relationship between part/serial numbers and the next higher assembly in IMDS.
- 7.2.4.5.4. (Added) Order, manage and dispose of HAZMAT items for applicable TCIs utilizing the cradle-to-grave methodology. The requisition number will be forwarded to the applicable PS&D section for follow-up action.
- 7.2.4.5.5. (Added) Request IMDS screen access by letter from applicable IMDS sub system manager from MOF PS&D for access to any TCI or SI subsystem screens needed. Letter must state reason for needed access, name of individual, rank, office symbol, user ID, employee number, work center, and profile (TRIC and option requested).
- 7.2.6.2.1.2.1 (Added) Provide a weight and balance letter on all TCTO's stating that the TCTO has been reviewed by the weight and balance manager.
- 7.2.6.2.3.6.1. (Added) The using organization or back shop requiring HAZMAT items for TCTOs will order, manage and dispose of the material utilizing the cradle-to-grave methodology per established HAZ Mart policies. Forward the document numbers and requisition numbers to MOF PS&D NLT 3 duty days after request.
- 7.2.7.2.1.1. (Added) Send a list of overdue and out of configuration TCIs to applicable scheduler NLT 1000 first duty day of each week using MSAT.
- 7.2.7.2.1.2. (Added) Provide slide reflecting overdue, uncorrected or out of configuration TCIs to MXG/CC NLT last duty day of current week.
- 7.2.7.2.1.3. (Added) Forecast and order TCIs using procedures in AFI 21-101, T.O. 00-20-9 and all relevant supplements.
- 7.2.7.2.1.4. (Added) Create and defer a JCN using applicable JST in IMDS.

- 7.2.7.2.1.5. (Added) Order non-CAD/PAD items using SBSS.
- 7.2.7.2.1.6. (Added) Verify removed part is deleted from IMDS. Dedicated scheduler provides response to MOF PS&D for quarterly TCI and SI audit by close of business the day of the suspense. Reponses must include corrective action of discrepancies found during the audit.
- 7.2.7.2.1.7. (Added) Order and manage HAZMAT items for applicable TCIs utilizing the cradle-to-grave methodology. The requisition number will be forwarded to the dedicated PS&D section for follow-up action.
- 7.2.7.3.1.1. (Added) Manage, track and schedule all engine related TCIs, TCTOs and inspections.
- 7.2.7.3.1.2. (Added) Provide MOF PS&D with a list of all TCIs coming due within 400 hours.
- 7.2.7.3.1.3. (Added) Provide MOF PS&D a copy of the Engine Management plan and forecast monthly.
- 7.2.7.8.1. (Added) MOF PS&D or OL scheduler must process IMDS screen 128 for all removal, installation, SI, TCI and TCTO compliance updates for any items.
- 7.2.7.8.2. (Added) Engine Management must process IMDS screen 128 for engine components, removal/installs, SI, TCI and TCTO compliance.
- 7.2.7.8.3. (Added) Personnel that require scheduling screens to process IMDS screens 128 suspenses, 45/46 removal and installs must request IMDS screen access and receive proper training through MOF PS&D.
- 7.2.7.9.1. (Added) AFE will:
- 7.2.7.9.1.1. (Added) Perform a 100% inventory and validation of all items to ensure IMDS approved configuration items match the actual configuration during acceptance inspections.
- 7.2.7.9.1.2. (Added) As a minimum, verify the accuracy of the part number, serial number, work unit code, quantity, due date, DOM, DOI and lot number.
- 7.2.7.9.1.3. (Added) Assist AMU PS&D in correcting all configuration errors.
- 7.2.7.13. (Added) The 9 PSPTS Operations Flight will:
- 7.2.7.13.1. (Added) Perform a 100% inventory and validation of all life support items to ensure ALSMS approved configuration items match the actual configuration.
- 7.2.7.13.2. (Added) As a minimum, verify the accuracy of the part number, serial number, work unit code, quantity, due date, DOM, DOI and lot number.

- 7.2.7.13.3. (Added) Load new AFE equipment items in ALSMS as replacement occur.
- 7.2.7.13.4. (Added) Provide ALSMS printout to AFE section with each personnel parachute delivered for maintenance.
- 7.2.10.1. (Added) Acceptance inspections will be performed on U-2 aircraft per the directions of higher headquarters. Quality Assurance will update the master weight and balance record for aircraft returning from depot maintenance.
- 7.2.10.2. (Added) Acceptance inspections will be accomplished on RQ-4 aircraft, RD2-A MCE and RD2-B LRE immediately after delivery from the factory, another unit, programmed depot maintenance, or contract field team maintenance when possession is transferred to the team.
- 7.2.10.3. (Added) Acceptance inspections will be accomplished prior to any maintenance actions, other than those required to safe the aircraft or pilot-reported discrepancies that would not hinder the validation of the acceptance inspection.
- 7.2.10.4. (Added) Transfer inspection checks will be accomplished IAW T.O. 00-20-1, the applicable mission design series T.O. and this instruction.
- 7.2.10.5. (Added) Transfer requirements when an aircraft is transferred to another unit will be negotiated between the gaining/losing units.
- 7.2.11.1.1.1 (Added) In addition to the requirements of T.O. 00-20-1 and AFI 21-101, performing work centers will ensure PS&D receives AFTO Form 95 for new equipment that require AFTO Form 95 IAW applicable -6 T.O.
- 7.2.11.1.1. 2. (Added) PS&D will initiate an IMDS Automated History Event upon receipt of all new equipment requiring an AFTO Form 95.
- 7.2.11.1.1.3. (Added) PS&D will:
- 7.2.11.1.3.1. (Added) Develop a local JST for aircraft and equipment transfer and acceptance inspections in conjunction with quality assurance.
- 7.2.11.1.3.2. (Added) This JST must meet all T.O. 00-20-1, T.O. 2-1-18 and applicable aircraft Dash-6 and Dash-21 T.O. requirements, as well as AFI 21-103 and MAJCOM specific transfer requirements.
- 7.2.11.1.3.3. (Added) Include historical records (e.g., NDI records, egress records, weight and balance records, oil analysis program records, strut records) and other items listed below.
- 7.2.11.1.3.4. (Added) Notify the MOC, MDS and applicable AMU representative when there is an aircraft gain, loss, or position identifier change due to aircraft transfer, acceptance, or DFT/CFT work is accomplished IAW TO 00-25-107 request.

- 7.2.11.1.2. Jacket files will accompany aircraft deployed for 120 days or more.
- 7.2.11.1.2.1. (Added) Review historical documentation, (MXG Form 3) as well as AFTO Form 95's, AFTO Form 781 A/H/J/K's, and major inspection packages.
- 7.2.11.1.2.2. (Added) Ensure the AFTO Form 95 binder, current ARC, SHD printed or saved on a disk, AHE printed or saved on a disk and PRA printed or saved on a disk to include special inspections and time change items are sent with the aircraft for T-38 aircraft phase input.
- 7.2.11.1.2.3. (Added) Schedule an acceptance inspection JST in IMDS for aircraft, LRE and MCE.
- 7.2.11.1.2.4. (Added) Load TCTO AFTO Form 95 into IMDS.
- 7.2.11.1.3. Document all findings on the Aircraft Annual Decentralized Records Review Checklist, (MXG Form 4). Electronic copies of the checklists are located in the PS&D shared drive. Provide maintaining work centers with a list of all errors discovered during reviews.
- 7.2.11.1.3.1. (Added) Maintaining work centers will:
- 7.2.11.1.3.1.1. (Added) Ensure records are available during decentralized records review.
- 7.2.11.1.3.1.2. (Added) Correct all errors discovered during records review NLT next duty day.
- 7.2.11.1.3.1.3. (Added) Provide applicable PS&D section a statement of corrective actions.
- 7.2.11.1.3.1.4. (Added) Review delivered jacket file; verify all documentation is included and distribute to the appropriate work centers.
- 7.2.11.1.3.1.5. (Added) Update line replaceable unit AFTO Forms 95 in IMDS.
- 7.2.11.1.3.1.6. (Added) Perform document review for aircraft, LRE and MCE.
- 7.2.11.1.3.1.7. (Added) MXS Engine Shop will:
- 7.2.11.1.3.1.8. (Added) Perform general visual inspection of engine IAW with applicable T.O..
- 7.2.11.1.3.1.9. (Added) Complete engine serially controlled item checklist and return checklist to Engine Management.
- 7.2.11.1.3.1.10. (Added) Perform a 7-level visual engine inspection.
- 7.2.11.1.4.1. (Added) Develop and maintain missing AFTO Forms 781 letter for all PS&D sections.
- 7.2.11.1.4.2. (Added) Track missing AFTO Forms 781 using 3 copies of the missing forms letters, (MXG Form 5).

- 7.2.11.1.4.3. (Added) One letter goes to the appropriate section chief.
- 7.2.11.1.4.4. (Added) One letter goes into the aircraft jacket file in place of the missing forms.
- 7.2.11.1.4.5. (Added) One letter stays with the scheduler for tracking the 5-duty-day suspense.
- 7.2.11.1.4.6. (Added) When 781 forms are found, file in appropriate jacket file, remove and dispose of missing forms letter.
- 7.2.11.1.6. (Added) Maintain current copy of all appointment letters for dash 21 equipment custodians.
- 7.2.11.1.7. (Added) File copy of AF Form 2692s in applicable aircraft jacket file.
- 7.2.11.1.8. (Added) MXG/QA will:
- 7.2.11.1.8.1. (Added) Work with PS&D to develop an acceptance JST.
- 7.2.11.1.8.2. (Added) Perform a follow-up QVI of the engine inspection performed by engine shop.
- 7.2.11.1.8.3 (Added) Perform a basic post flight QVI (aircraft only).
- 7.2.11.1.8.4. (Added) Perform acceptance inspection follow-up and validate configuration management data (LRE and MCE).
- 7.2.11.1.9. (Added) AMU officer in charge/superintendent will:
- 7.2.11.1.9.1. (Added) Coordinate with the dedicated crew chief, engine shop, Air Force Engineering and Technical Services, field service representatives, and QA to review all discrepancies discovered.
- 7.2.11.1.9.2. (Added) Forward the draft Acceptance Inspection Deficiency Report (AIDR), if required, to the Product Improvement Office within 5 days of acceptance inspection completion.
- 7.2.11.1.9.3. (Added) Ensure maintenance personnel strictly adhere to and accomplish all requirements shown in **Attachment 21** when accepting RQ-4 aircraft on initial delivery from the manufacturer, **Attachment 22** when accepting RD-2A MCEs and **Attachment 23** when accepting RD-2B LREs.
- 7.2.11.1.10. (Added) The 9 MXG Product Improvement Manager will submit the AIDR to ACC within 15 days of the acceptance inspection completion.
- 7.10.7.4.1. (Added) Send reconciliation of overdue/missing inspections/TCIs from MSAT by aircraft NLT 1000 on the first day of the week for applicable aircraft to dedicated scheduler with

- a 5-duty-day suspense.
- 7.10.7.4.2. (Added) When corrective action is received, document changes to aircraft PRA, print new MSAT report and maintain until next quarterly review.
- 7.10.7.4.3. (Added) Dedicated scheduler will inspect reconciliation and make corrections in IMDS and applicable MIS products.
- 7.10.7.4.4. (Added) Dedicated scheduler will return reconciliation to MOF PS&D within 5 duty days with written corrective action.
- 7.10.7.4.5. (Added) Dedicated scheduler must verify corrected discrepancies in IMDS and provide response to MOF PS&D for Quarterly TCI and SI audit by COB 5 duty days after response has been initiated. Responses must include corrective action of discrepancies found during the audit.
- 7.10.7.5. (Added) Special Inspection Procedures.
- 7.10.7.5.1. (Added) Send a list of overdue and missing inspections to applicable scheduler NLT 1000 first duty day of each week using MSAT.
- 7.10.7.5.2. (Added) Provide slide reflecting overdue, uncorrected or missing inspection to MXG/CC NLT the last duty day of current week.
- 7.10.7.5.3. (Added) Maintain MXG/CC approved aircraft under fly/overfly authorization letter.
- 7.10.7.5.4. (Added) Performing workcenters to include egress, survival equipment, PSPTS will take time to complete work orders using applicable JST's to update IMDS.
- 7.10.13.1. (Added) Meetings are held 1st and 3rd Friday of each month with all agencies to monitor aircraft utilization and maintenance resources to ensure wing programs and commitments are met and that shared resources and schedules are deconflicted to cover requirements within the current month.
- 7.10.13.2. (Added) As a minimum, the following agencies are required to attend: U-2 scheduler, RQ-4 scheduler, T-38 scheduler, survival equipment, Egress & Det 15 of the 373d Training Squadron.
- 7.10.13.3. (Added) Ensure aircraft and equipment are scheduled to meet all training needs.
- 7.10.13.4. (Added) Review weekly and monthly training schedules prior to publication to minimize impact on production and facilities.
- 7.10.14.1. (Added) Check previous days scheduled maintenance daily NLT 0900.
- 7.10.14.2. (Added) Print uncompleted snapshots (screen 122) of the job and file with the

- applicable weekly schedule.
- 7.10.14.3. (Added) On Monday, NLT 0900, PS&D will email dedicated AMU scheduler the MSE calculations.
- 7.10.14.4. (Added) Dedicated AMU scheduler will reply with response on missed scheduled maintenance for previous week NLT 1200.
- 7.10.14.5. (Added) PS&D will resend dedicated AMU scheduler a final copy of MSE with percentage and responses.
- 7.10.14.6. (Added) Dedicated AMU scheduler will inform AMU supervision of previous weeks MSE.
- 7.12.8. (Added) Aircraft Over-/Under-Fly Authorization Procedures.
- 7.12.8.1. (Added) The 9 MXG/CC is the approval authority to under or over-fly periodic inspection time by no greater than 20 hours IAW T.O. 1U-2S-6. All under- and over-fly approvals will be information copied to HQ ACC, 12 AF and WR-ALC/LX.
- 7.12.8.2. (Added) Under or over fly requests in excess of 20 hours must be coordinated through 9 MXG/CC, HQ ACC and 12 AF. WR-ALC/LX is the final approval authority for requests in excess of 20 hours.
- 7.12.8.3. (Added) All requests to under- or over-fly periodic inspections fly will be submitted in writing by aircraft maintenance units to 9 MOS/MXOOP. 9 MOS/MXOOP will forward the request to 9 MXG/CC for coordination and approval, then forward request to HQ ACC, 12 AF, and WR-ALC/LX as appropriate. E-mail or telecom requests will not be accepted.
- 7.13. (Added) Local Flying Hour Accounting Procedures.
- 7.13.1. (Added) Tracking, reconciling and reporting the flying hour program is the responsibility of the AVUM. Guidance for completing AFTO form 781 can be found in T.O. 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies, and procedures, AFI 11-401, *Flight Management*, AFI 21-101, *Aerospace Equipment Management*, and this instruction.
- 7.13.1.2. (Added). Maintenance Data Systems Analysis (MDSA) will:
- 7.13.1.3. (Added) Provide PS&D an electronic copy of previous days Accomplishment Utilization Report (AUR) daily and monthly for each AMU NLT the first duty day of the following month and as requested.
- 7.13.2. (Added) PS&D will:
- 7.13.2.1. (Added) Save a copy of previous days AUR daily.

- 7.13.2.2. (Added) Send AUR to AVUM, OSS Current Operations, Debrief, Wing Operations Scheduling Office, and Aviation Resource Management NLT 0900 the following day for reconciliation.
- 7.13.2.3. (Added) In conjunction with OSS AVUM, ensure all discrepancies between MIS and the AFTO Forms 781 are corrected prior to submission.
- 7.13.2.4. (Added) In conjunction with OSS AVUM compare the flying hours in the MIS with flying hours in ARMS monthly to ensure the data in the MIS represents hours flown.
- 7.13.3. (Added) AVUM will:
- 7.13.3.1. (Added) Obtain previous days daily AUR from PS&D.
- 7.13.3.2. (Added) Forward copy of previous days AUR to AMU debrief and Squadron Aviation Resource Management (SARM) for flying hour verification. Debriefing sections and SARM monitors will reconcile all sorties and hours flown on the AUR and return a signed copy to the OSS AVUM. If a disparity exists, the de-briefer or SARM monitor will annotate the difference on the AUR with the de-briefer correcting the MIS and notifying AMU PS&D of corrections.
- 7.13.3.3. (Added) Obtain reconciled signed copy of daily AUR from AMU debrief and SARM for previous days flying NLT 1000 hours the next duty day. The OSS AVUM will verify corrections were made in the MIS using AUR. If corrections were not made, the OSS AVUM will coordinate with MOF PS&D flight for appropriate action.
- 7.13.3.4. (Added) File daily AUR until replaced by signed monthly AUR.
- 7.13.3.5. (Added) Obtain a monthly cumulative AUR from PS&D. Forward copy to AMU debrief and SARM for flying hour verification.
- 7.13.3.6. (Added) Obtain reconciled signed copy of cumulative AUR from AMU debrief and SARM sorties and hours flown and maintain until monthly report is obtained.
- 7.13.3.7. (Added) Ensure all sorties and hours flown are reconciled monthly by the 4th day of the following month IAW this instruction and chapter 2 of AFI 21-103.
- 7.13.3.8. (Added) File monthly AUR for one year.
- 7.14. (Added) Manual Procedures for IMDS Updates during System Downtime.
- 7.14.1. (Added) All procedures for manual update of IMDS products apply to both home station and deployed locations.
- 7.14.2. (Added) See **Attachment 24** for manual JCN block assignment. These JCNs are established only for manual input of JCNs during IMDS downtime and deployment processing.

- 7.14.3. (Added) All work centers that use IMDS products will manually update all IMDS products by lining through old data and writing changes in red as they occur until new products are received. New products will be verified to ensure all changes were updated correctly in IMDS before disposing of old products. Units may keep an electronic version of the most recent MIS products as a back-up plan for when MSAT is unavailable for more than 48 hours.
- 7.15. Static Display Aircraft Request Requirements.
- 7.15.1. (Added) All requests must be made no later than 2 weeks prior to the required date. Other requests will be treated as an exception to policy and will be handled as they occur.
- 7.15.2. (Added) Static displays should only be on Fridays, in dock 6, from 0730-1530.
- 7.15.3. (Added) Static display requirements will be discussed at the Shared Resources meeting. Requests for T-38, U-2 and RQ-4 aircraft will be coordinated through 9 MOS/MXOOP.
- 7.15.4. (Added) PS&D will obtain approval or non-approval from the appropriate aircraft maintenance unit and notify the requester.
- 7.15.5. (Added) PS&D will obtain 9 MXG/CC approval and have the static display reflected in the weekly schedule.
- 7.15.6. (Added) All requests will be submitted via Static Display Request, (<u>Attachment 39</u>) and will be forward to 9 MOS PS&D via e-mail to 9mos.mxoop@beale.af.mil or faxed to 4-8652 for coordination.
- 7.15.7. (Added) Sponsor/requestors are responsible for ensuring all tour participants meet minimum security requirements to be in close proximity of operational aircraft.
- 7.15.8. (Added) Sponsor/requestors are responsible for the safety and security of their guests at all times while viewing aircraft and will not leave them unescorted in the area. Photography is only permitted as outlined in the Beale AFB Installation Security Instruction. Photography of sensor-configured aircraft is strictly forbidden.
- 8.2. To include FOL QA.
- 8.2.11. (Added) Evaluate checklists for accuracy, intent and necessity as required.
- 8.2.12. (Added) Include a review of emergency action/functional checklists for currency/necessity in the Maintenance Standardization and Evaluation Program at least annually, and ensure this review is documented in the QA database.
- 8.4.10.1. (Added) AMUs may maintain a copy master forms binder. The AMU master forms binder will be taken to QA for review semi-annually. An Air Force Form 2411, *Inspection Document*, or equivalent, will be placed after the master cover AFTO Form 781 binder and before the AFTO Form 781F, *Aerospace Vehicle Flight Report and Maintenance Document* to annotate these reviews. This review will be a non-rated special inspection.

- 8.14.1. TODO's will pull applicable TCTO's off of Dragon's Lair and/or Joint Technical Data Integration Systems.
- 8.14.1.3 FOL's will mark their own TCTO's with "working copy/destroy when complete" stamp.
- 8.14.1.4 (Added) FOL's will provide the supply letter & weight and balance letter for their specific location.
- 8.14.5.1.8.14.5.1. (Added) The performing work center will:
- 8.14.5.1. 1. (Added) Generate the local source document on template supplied by TODO and serve as the POC.
- 8.14.5.1. 2. (Added) Ensure that the locally prepared data will not be created to consolidate procedures already established by other Air Force technical data and publications.
- 8.14.5.1. 3. (Added) Route to QA for review.
- 8.14.5.1.4. (Added) Ensure LWCs, LJGs, LPSs and LCLs are reviewed for currency when source reference data changes (this can be done by reviewing ETIMS or the Weekly TO change notification).
- 8.14.5. 2. (Added) QA will:
- 8.14.5.2. 1. (Added) Review locally prepared publication for content applicability and accuracy.
- 8.14.5.3. (Added) Site Specific TODO will:
- 8.14.5.3. 1. (Added) Manage locally prepared publications according to AFI 21-101 and TO 00-5-1 to include the MAJCOM and base supplements.
- 8.14.5.3.2. (Added) Assign an identification number to LWC, LCL, LJG and LPSs (ex. LCL-9MXG-XXX) and conduct format review.
- 8.14.5.3.3. (Added) Route the local publication for Group CC signature.
- 8.14.5.3. 4. (Added) Keep the original copy on file (no date stamp) and give a date stamped copy to the applicable work centers.
- 8.14.7. (Added) All FOL's will have an annual TO inspection done by a 9 RW or local organization TODO.
- 8.16.1.1. 1. OCFs may be tailored to inspect a specific system or systems and flown in conjunction with other training or operational sorties.

- 8.16.2.1.5. (Added) 9 MXG or FOL QA FCF functions will:
- 8.16.2.1.5.1. (Added) Appoint a QA FCF manager in writing.
- 8.16.2.1.5.2. (Added) Monitor and ensure the standardization of FCF and OCF procedures.
- 8.16.2.1.5.3. (Added) Maintain the FCF information file for FCF aircrew to review and provide a forms and worksheet walk-through for FCF aircrews.
- 8.16.2.1.5.4. (Added) Host FCF crew briefing prior to scheduled take off at location agreed upon by FCF OIC, AMU/MXS or FOL equivalent production superintendent, and QA representative.
- 8.16.2.1.5.5. (Added) Inform aircrew scheduling of an impending FCF when all maintenance associated with the FCF is complete. For phase aircraft this notification is made only after the aircraft is post docked and all forms are complete.
- 8.16.2.1.5.6. (Added) Call aircrew scheduling NLT 1200 the day before the planned FCF to schedule the FCF.
- 8.16.2.1.5.7. (Added) Schedule FCF crew brief reference 8.16.2.1.3.
- 8.16.2.1.5.8. (Added) Verify ER is signed off by a production superintendent.
- 8.16.2.1.5.9.. (Added) Develop and implement local FCF profile flow plan.
- 8.16.2.1.5.10. (Added) Thoroughly review forms prior to FCF brief, paying particular attention to ensure all Red X discrepancies are properly cleared and any required in-process or key task list inspections were completed and properly documented.
- 8.16.4.1. (Added) AMUs, MXS MX Flight, or FOL equivalent will:
- 8.16.4.1.1. (Added) Notify MOC and QA when an aircraft requires an FCF.
- 8.16.4.1.2. (Added) Make a red dash entry in the AFTO Form 781A stating "FCF due for ..." in the discrepancy block with the specific reason for the FCF.
- 8.16.4.1.3. (Added) Make a red dash entry in the AFTO Form 781A stating "QA forms review due prior to FCF."
- 8.16.4.1.4. (Added) Ensure AFTO Form 781 documentation is complete prior to the FCF crew briefing, paying particular attention to ensure Red X discrepancies are properly cleared and any required in-process or key task list inspections were completed and properly documented. The only exception will be ER and maintenance discrepancies required to facilitate aircraft launch may remain open.
- 8.16.4.1.5. (Added) If for any reason the FCF cannot be flown on the planned day, all

- documentation/verification and another crew briefing will be re-accomplished on the next possible day.
- 8.16.4.1.6. (Added) Notify MOC of aircraft status after the FCF and if aircraft is released or not released.
- 8.16.5.2. (Added) RQ-4 Global Hawk FCF profile.
- 8.16.5.2.1. (Added) There is no functional check flight for the RQ-4A/B. Systems will be checked during a series of tie-down or taxi checks.
- 8.16.5.2.2. (Added) Each segregated portion listed in MDS-specific technical data will be treated as a separate FCF.
- 8.16.5.2.3. (Added) The only RQ-4 minimum FCF weather requirement not listed in system TOs is daylight. The 9 OG/CC or designated representative (squadron/detachment/ TDY mission commander) is waiver authority IAW T.O. 1-1-300, Para 6.2).
- 8.16.5.2.4. (Added) RQ-4A/B minimum fuel load to complete FCF is 65 to 69 percent of maximum fuel load.
- 8.16.5.2.5. (Added) The FCF briefing will take place prior to the scheduled event. Any delays will be coordinated with the FCF OIC and QA.
- 8.16.5.3. (Added) U-2 Dragon Lady FCF profile.
- 8.16.5.3.1. (Added) The high-profile mission is normally flown for each U-2 FCF, but may be tailored to inspect only the functional ability of the system or systems that generated the FCF condition (e.g. a low profile FCF flown for flight control rigging). Note: FCF OIC will decide whether high- or low-profile FCF is necessary.
- 8.16.5.3.2. (Added) FCFs generated as the result of two-seat U-2 phase inspections require qualified pilots in both cockpits. One pilot must be a current FCF pilot and the other an IP, IP upgrade trainee or an FCF trainee. Other two-seat FCFs may be flown either dual or solo, based on the FCF OIC recommendation and pilot availability.
- 8.16.5.3.3. (Added) FCF minimum weather is daylight, visual meteorological conditions and 3 miles visibility. The 9 OG/CC or designated representative (squadron/detachment/TDY mission commander) is waiver authority IAW T.O. 1-1-300, Para 6.2.
- 8.16.5.3.4. (Added) When conducting "VFR on top" FCFs, minimum weather at departure base is 5,000 AGL, 5-mile visibility and all FCF check list items must be conducted in VMC.
- 8.16.5.3.5. (Added) U-2 fuel loads are R-2 for full FCF profile, but the FCF OIC may approve an R-3 if required; this must be communicated to AMU production superintendent prior to FCF briefing.

- 8.16.5.3.6. (Added) U-2 FCFs are normally flown in the clean configuration; however, the FCF OIC can approve FCFs with empty super pods, defensive systems, and IDL data links. All other PME and SPUR data links must be downloaded, (except Group B wiring) for an FCF. Exceptions may be made on a case by case basis with approval from both the MXG/CC and the OG/CC.
- 8.16.5.3.7. (Added) The FCF briefing will take place prior to launch at a pre-determined location. Phase aircraft requiring an FCF will have the forms ready for review prior to the scheduled take off. Any delays will be coordinated with the FCF OIC and QA.
- 8.16.5.3.8. (Added) The mobile chase vehicle, pilot(s), production superintendent, maintenance crew and a QA representative will gather at the aircraft when the pilot(s) step to re-verify aircraft status, to included aircraft tail number and FCF profile requirement.
- 8.16.5.4. (Added) T-38 Talon FCF profile.
- 8.16.5.4.1. (Added) Aircrew qualified for T-38 FCFs are provided via contract from Holloman AFB, New Mexico.
- 8.16.5.4.2. (Added) The ACC QAE function will communicate the details of T-38 FCFs to the 9 MXG/CC as a courtesy.
- 8.16.5.4.3. (Added) ACC QAE will ensure FCFs are managed per contract.
- 8.16.5.5. (Added) Off-station aircraft FCF requirements.
- 8.16.5.5.1. (Added) At detachments and operating locations the commander and operations officers are the primary FCF pilots and will be qualified and certified IAW this instruction.
- 8.16.5.5.2. (Added) The detachment commander serves as the OG/CC representative, ensuring TDY FCF pilots are briefed on these procedures prior to flying an FCF. Detachment or operating location CCs will be the OG/CC representative for off station FCF related decisions, and FCF related waiver authority when authorized.
- 8.16.5.5.3. (Added) The detachment or operating location CC will ensure only FCF qualified aircrew conduct FCFs at off station locations.
- 8.16.5.5.4. (Added) Units with off-station aircraft requiring an FCF will coordinate with host base FCF manager and comply with local requirements. If there is no host base FCF program in place or the requirements are less stringent than Beale AFB, home station procedures will be followed.
- 8.16.5.6. (Added) Transient aircraft FCF requirements:
- 8.16.5.6.1. (Added) Transient Alert will inform MXG QA FCF Program Manager of all transient aircraft requiring an FCF.

- 8.16.5.6.2. (Added) QA FCF program manager will coordinate with transient alert and owning organization to ensure all local FCF requirements are accomplished on transient aircraft requiring an FCF.
- 8.16.8. (Added) The FCF OIC will:
- 8.16.8.1. (Added) Ensure aircrews are properly trained and briefed on specific FCF requirements, procedures and hazards, (**Attachment 25**).
- 8.16.8.2. (Added) Identify FCF pilots on an FCF Certification Letter, ensure the letter is approved by the 9 OG/CC, forward a copy of the letter to the 5 RS, 1 ERS, 12 AMU, 99 AMU and 9 MXG QA and maintain the original on file.
- 8.16.3. (Added) Ensure mobile chase vehicle operators for FCFs are instructor pilots that receive FCF mobile chase vehicle training as part of the instructor upgrade syllabus. FCF mobile chase vehicle training will orient the new instructor to FCF procedures and qualify them as mobile chase vehicle operators for FCF missions.
- 8.18.2. (Added) RQ-4 high-speed taxi is defined as greater than normal taxi speed (25 knots). The aircraft will not be taxied above 60 knots unless specifically required by maintenance and authorized by the 9 OG/CC. High-speed taxi tests are not conducted with U-2 aircraft.
- 8.18.3. (Added) Aircrew and maintenance will ensure operability of aircraft as there is the possibility of flight due to unexpected problems.
- 8.18.4. (Added) Aircraft must have the minimum practical fuel on-board for the taxi check while retaining enough for the possibility of unexpected flight and subsequent landing with applicable fuel reserves.
- 8.18.5. (Added) High-speed taxi checks will be accomplished only by a qualified FCF aircrew.
- 8.18.6. (Added) Before a high-speed taxi check is attempted, 9 MXG/QA (RQ-4) or ACC QAE (T-38) must ensure proper computation for center of gravity.
- 8.18.7. (Added) Aircraft commander must compute take off data for the highest speed expected to ensure sufficient stopping distance is available for existing runway conditions without exceeding normal brake energy limits.
- 8.18.8. (Added) Allow sufficient cooling time for aircraft brakes between additional taxi checks.
- 8.18.8.1. (Added) Have the aircraft checked for hot brakes before returning to the chocks.
- 8.18.9. (Added) RQ-4 Procedures.
- 8.18.9.1. (Added) The 9 MXG/CC will determine if a high-speed taxi should be performed IAW applicable maintenance technical data following aircraft maintenance. The minimum fuel load

- to conduct the high-speed taxi check for the RQ-4A is 9,600 lbs and RQ-4B is 10,600 (60 percent of maximum fuel).
- 8.18.9.2 (Added) High-speed taxi checks will be authorized by the 9 OG/CC in coordination with the 9 MXG/CC or their designated representatives at forward locations.
- 8.19.1.10. (Added) Building numbers 1069, 1074, 1075, 1076, 1077, 1078 (docks 1-6) and 11200 (dock 8) meet the T.O. 1-1B-50 requirements to weigh aircraft.
- 8.19.3. (Added) Weight & Balance Procedures.
- 8.19.3.1. (Added) When an item is removed affecting W&B (not included in basic weight) the technician will annotate the equipment removal on an appropriate symbol in AFTO Form 781A, Maintenance Discrepancy and Work Document and 781C, Avionics Configuration and Load Status Document. Enter a Red X discrepancy for 'W&B due verification' in AFTO Form 781A.
- 8.19.3.2. (Added) (RQ-4 ONLY) If EISS ballast is installed, the discrepancy will be signed off as 'Ballast installed and connectors stowed IAW XX' the applicable TO. The corrective action will refer to the next available discrepancy block where the ballast installation will be documented on a red diagonal.
- 8.19.3.3. (Added) For TCTOs affecting W&B, the performing work center will notify the QA W&B manager before TCTO is performed on affected aircraft. Enter a Red X discrepancy for 'W&B due verification' in AFTO Form 781A.
- 8.26. (Added) Depot Level Maintenance Assistance Request Procedures.
- 8.26.1. (Added) When a repair procedure is beyond an organization's capabilities, the 9th MXG may request depot-level assistance from the applicable MDS depot. The 9 MXG IMT Form 107, will be used for all depot-level assistance requests to ensure this process is implemented with minimum delays.
- 8.26.1.1. (Added) Deployed 9 MXG QA inspectors may submit Form 107 directly to 9 MXG/CC with a courtesy copy to 9 MXG/QA. FOLS operating with permanently assigned QA inspectors will submit Form 107s to 9 MXG/QA for review and submissions.
- 9.3.4.1. (Added) While deployed, the MOO/SUPT, or senior maintenance member will determine if impoundment is warranted for reasons not listed in the mandatory impoundment list. 9.3.4.2. (Added) Course code 002122 will be used.
- 9.3.4.3. (Added) For deployed locations, the 9 MXG/CC will designate in writing the impoundment release authority; this can be accomplished by electronic message, but that message must be maintained by the designated impound release authority.

- 9.3.4.4. (Added) The FOL CC will fulfill the role of the MXG/CC for the impoundment release authority. When the FOL CC is off station, the DO will fulfill the role of MXG/CC for the impoundment release authority; this authority will not be delegated.
- 9.3.4.5. (Added) Locations that have an established expeditionary chain of command (i.e. 380 EAMXS/U-2 AMU) will follow the local guidance provided.
- 9.4.11.4. (Added) FO or lost item is suspected in the cockpit (see Para 9.8.).
- 9.6.1.1. (Added) Place an impoundment JST in the aircraft AFTO Forms 781A. The reason for an equipment impoundment is manually annotated in AFTO Form 244.
- 9.6.1.2. (Added) If JST # 00703 is unavailable ensure the following entries are manually entered in the AFTO Forms 781.
- 9.6.1.2.1. (Added) Red X entry stating "Aircraft impounded by (impound authority's rank/name). See page () block ()" to refer to the original impoundment discrepancy.
- 9.6.1.2.2. (Added) Separate red dash entry stating 'All maintenance on hold until the aircraft is released for maintenance by the impoundment official.'
- 9.6.1.2.3. (Added) Separate red dash entry stating 'Forms review by impoundment official required prior to release of the impoundment.'
- 9.6.1.2.4. (Added) Separate red dash entry stating 'Forms review by QA required prior to release of the impoundment.'
- 9.6.1.3. (Added) Ensure the area surrounding aircraft/equipment or engine is coned/roped off and that impoundment signs are placed in front and rear of aircraft.
- 9.6.1.4. (Added) Use the Impound Worksheet, (**MXG Form 6**), Impoundment Official Checklist, (**Attachment 26**) and CAF IMT Form 147 for all impoundments.
- 9.6.7.1. (Added) Signs the AFTO Form 781A and Impound Worksheet and clear IMDS after the discrepancy driving the impoundment is cleared.
- 9.6.7.2. (Added) Reports to QA with the aircraft/equipment/engine forms when all corrective actions have been completed.
- 9.6.7.3. (Added) After QA completes and signs off the forms review, proceed to and brief the impoundment release authority on findings, corrective actions, and request release of the aircraft or equipment from impoundment.
- 9.6.11.1. (Added) Notify MOC when the impoundment is cleared to ensure aircraft/equipment/engine status is updated.

- 9.8. (Added) FO and lost item impoundments.
- 9.8.1. (Added) If the impoundment is due to FO or a missing item suspected in the cockpit, separate red dash discrepancies for 5-level and 7-level visual FO inspections will be entered in the AFTO Forms 781A in addition to the standard impoundment AFTO Forms 781 A entries. A borescope may be used to facilitate the inspection.
- 9.8.2. (Added) If FO or a missing item suspected in the cockpit is not recovered after a visual or borescope inspection, the cockpit will be vacuumed. This requirement will be entered in the AFTO Forms 781A on a red dash, and any items found placed in a bag to accompany the aircraft forms as the impoundment is cleared.
- 9.8.3. (Added) If the missing item is found, the individual who found the item will sign off the corrected by block and at a minimum a MSgt assigned to production element or higher will sign off the inspected by block. If an aircraft or equipment is impounded, the Impound Official will sign off the inspected by block.
- 9.8.4. (Added) If the missing item is not recovered after all steps above have been completed, the individual who accomplished the FO search will sign off the corrected by block. The individual who signs off the 'inspected by' block will be no lower than squadron MOO/SUPT.
- 9.9. (Added) Physiological incidents.
- 9.9.1. (Added) Immediately recall the aircraft if notified of a potential physiological incident during a flight. If not flying and the aircraft has not had a successful flight, immediately impound the aircraft and remove it from the flying schedule until it can be determined the LOX system is not suspect. If the aircraft has flown a successful flight MXG/CC or FOL/CC will determine if impound due to the LOX system is warranted.
- 9.9.2. (Added) Immediately impound the suspect LOX cart. Identify, but do not impound, other aircraft serviced by suspect LOX cart. If it is determined the LOX was causal, immediately recall and impound all aircraft serviced by the LOX cart. NOTE: Majority of physiological incidents are pilot/human performance related.
- 9.9.3. (Added) To determine LOX quality, a simple sniff test will be performed. If the suspect aircraft LOX system or LOX cart fails the sniff test immediately notify LRS to determine what mass storage unit serviced the LOX cart and isolate it to determine cause.
- 9.9.4. (Added) Suspect aircraft will have its LOX system drained, filters replaced, hot purged and re-serviced in accordance with U-2 technical guidance.
 10.2.1.1.1. (Added) All 9 MXG and FOL Work Centers will:
- 10.2.1.1.1. (Added) Maintain a master CTK continuity book with the following information:
- 10.2.1.1.1.1. (Added) Appointment letters for all CTK custodians and alternates.

- 10.2.1.1.1.2. (Added) Change of custodian inventory letter.
- 10.2.1.1.1.3. (Added) Documentation of annual tool, CTK, non-CA/CRL equipment inspection.
- 10.2.1.1.1.4. (Added) Reference to lost tool procedures (**Attachment 28**).
- 10.2.1.1.1.5. (Added) Tool room access letter.
- 10.2.1.1.1.6. (Added) Spare tool access letter (limited to shift supervisor or equivalent, and CTK custodian.
- 10.2.1.1.1.7. (Added) List of references to include the location of this instruction.
- 10.2.1.1.1.8. (Added) Restricted item listings with approved individuals for specific items (May be broken down by items that are restricted with multiple authorizations from different AFSCs filed for same item.)
- 10.2.1.1.1.2. (Added) Maintain control of their assigned CTK at all times. CTKs will be locked when unattended. At no time will a CTK be secured to any portion of an aircraft.
- 10.2.1.1.3. (Added) Do not remove tools from a dispatch able CTK for use at another job site without production superintendent approval. Tools will not be issued individually from dispatch able CTKs.
- 10.2.1.1.1.4. (Added) Keep all CTKs free of foreign objects and common bench stock items such as nuts, bolts, washers and screws. Empty toolbox FOD bags/containers at the end of each shift.
- 10.2.1.1.5. (Added) Blue dye will be loaded and tracked in TAS (or equivalent) as a restricted item. Authorized individuals will be identified in TAS. Using work centers will track authorized personnel and provide current list to support section(s). The authorization letter will be kept on file in the Master CTK Book. For units not required to use TAS, work centers will establish local tracking procedures.
- 10.2.1.1.1.6. (Added) Lead seals removed from the work center will be packaged in a plastic bag or equivalent and marked with quantity. All unused and removed seals (pieces) will be accounted prior to leaving the job site and returned/disposed of accordingly.
- 10.2.1.1.1.7. Long-Term CTK/equipment Sign Out.
- 10.2.1.1.7.1. (Added) Long-term sign out of CTKs will not be used strictly for sake of convenience; i.e., launch kits will not be signed out for the flying week. Long-term sign out of CTKs must be approved by the unit Production Super.
- 10.2.1.1.7.2. (Added) Support will use TAS to sign out CTKs/equipment long-term. Support

- will include a CAF Form 140 with the issue for manual inventory. The MXG/CC or designated representative may waive use of TAS during contingencies or exercises.
- 10.2.1.1.1.7.3. (Added) In addition to contingencies or exercises, CTK items will only be signed out long term in TAS during times of heavy maintenance and will be signed manually by the oncoming individual taking over responsibility at each shift change using the CAF Form 140, CTK inventory and control log. The CAF Form 140 will remain in the CTK.
- 10.2.1.1.7.4. (Added)) In addition to contingencies or exercises, equipment items will only be signed out long term in TAS during times of heavy maintenance or if required to maintain an aircraft in set configuration, (i.e. carted aircraft) and will be signed manually at each shift change for inventory purpose using the CAF Form 140, CTK inventory and control log. The CAF Form 140 will remain with the AMU Expeditor or MXS Hawk Super as applicable.
- 10.2.1.1.1.7.5. (Added) If the outgoing individual is removed by exercise input, the ranking member at the job site will delegate the responsibility of the CTK for that work area using specified CTK on-site transfer procedures outlined in para.10.2.1.5.1.
- 10.2.1.1.1.7.6. (Added) CTKs or equipment items signed out long-term (if on-station) must be physically verified as complete by a member of the owning support section or shop a minimum of every 5 duty days and on the last normal duty day of the week.
- 10.2.1.1.2. (Added) Units/personnel not assigned to the 9 MXG dispatched to work on the flight line/airfield or in maintenance facilities supporting aircraft operations will:
- 10.2.1.1.2.1. (Added) Ensure all tools transported in the areas designated above are contained in a tool box or kit. Such boxes/kits are generically referred to as CTKs. Vehicle tool boxes are sufficient for this purpose.
- 10.2.1.1.2.2. (Added) Mark tools, at a minimum, with the owning organization, office symbol and phone number. This marking can be engraved or in ink with a permanent marker.
- 10.2.1.1.2.3. (Added) Maintain an inventory of all tools transported on the flight line or in a maintenance facility supporting aircraft operations. The inventory will be kept with the toolkit at all times.
- 10.2.1.1.2.4. (Added) Inventory all tools and equipment used on the flight line or aircraft maintenance facilities prior to entry to and exit from a work site.
- 10.2.1.1.2.5. (Added) Keep all tool kits free of FO and hardware such as nuts, bolts, washers, screws etc. A FOD receptacle will be placed and accounted for in the toolkit or vehicle used to transport the tool kit. The receptacle must completely secure the FO to prevent debris from falling out unnoticed. Empty all debris from receptacle when full or at the end of each shift.
- 10.2.1.1.2.6. (Added) The use of foam inlay cuts in the shape of the tools or items is highly recommended for ease of quick inventory and accountability.

- 10.2.1.1.2.7. (Added) Mark and control equipment that a work center issues to an individual with the owner's first initial, last name, and employee number (i.e. J. Doe, 1234). If no employee number is assigned, use the member's organization.
- 10.2.1.1.2.8. (Added) Immediately contact the MOC and base operations if a tool, object or piece of equipment is lost on the flight line or any aircraft maintenance facility. Give a description of the tool or item, and location of where it could have been lost. After notification, follow lost tool/object procedures in section 10.3.25 of this instruction, to include processing of a CAF Form 145. Note: CAF Form 145 can be located at the Air Force E-Publishing website at http://www.e-publishing.af.mil/. Enter "CAF 145" under "Search Titles" in upper right hand of webpage. Then click "Go" and it will bring up the correct form. Phone the 9 RW FOD Monitor for assistance if needed.
- 10.2.1.2.1. (Added) CTK/Support Equipment Inspections.
- 10.2.1.2.1.1. (Added) All units that dispatch personnel in direct support of flying operations will accomplish a semi-annual inspection on all dispatchable CTKs and equipment. Inspections will be documented in TAS (or equivalent). MXG Form 7 may be used as a checklist to aid during CTK inspections.
- 10.2.1.2.1.2. (Added) Each SE item on a CA/CRL will be inspected IAW the published TO inspection criteria. Scheduled inspections directed by a T.O. will be entered on an AFTO Form 244, Industrial/Support Equipment Record. If no T.O.-directed inspection exists for a piece of SE, a periodic inspection will be performed every 180 days. This inspection can be documented in an automated tool accountability system, the Integrated Maintenance Data System or an AFTO Form 244.
- 10.2.1.3.1. (Added) Warranty Tools.
- 10.2.1.3.1.1. (Added) Spare warranted tools will be stored separately from non-warranted tools. Tools removed from a CTK for placement into a spare tool bin will be de-etched and annotated in the spare tool control log by bin #, nomenclature, and quantity.
- 10.2.1.3.1.2. (Added) Broken warranted tools will be stored separately from broken non-warranted tools.
- 10.2.1.3.1.2.1. (Added) Unserviceable tools will be replaced on a one-for-one basis by a CTK custodian.
- 10.2.1.3.1.2.2. (Added) Identify requirements for spare tools by documenting removed tools on the MIL, TAS and annotating the Broken Tool Log.
- 10.2.1.3.1.2. 3. (Added) A log will be kept of broken tools stating CTK #, item description, date removed, removed by employee number, and warranted status (Y or N).

- 10.2.1.3.1.3. (Added) After removal of broken tool from a CTK, check the spare tool bin for the replacement tool. If the spare tool bin contains the proper replacement tool, remove it and update the spare tool quantity in TAS.
- 10.2.1.3.1.3.1. (Added) Unserviceable tools that cannot be immediately replaced with a warranted tool may be temporarily replaced with a non-warranted tool. Requirements for marking tools must still be met.
- 10.2.1.3.1.3.2. (Added) Issue replacement tools after inspecting the tool for serviceability and etching the CTK number on the tool.
- 10.2.1.3.1.4. (Added) CTK custodians or their appointed alternates will coordinate with the appropriate vendors and unit IMPAC holders for procurement of warranty/non-warranty tools and equipment.
- 10.2.1.4.3. (Added) Control and management of replacement, expendable, and consumable tools.
- 10.2.1.4.3.1. (Added) Unserviceable items will be removed from the CTK and documented on the MIL.
- 10.2.1.4.3.2. (Added) Replacement tools to include expendable/consumable tools will not be issued without receipt of the unserviceable tool or documentation indicating the tool is lost and reported IAW established lost tool procedures. Support personnel will replace the tool and ensure the new tool is etched with the correct identifier.
- 10.2.1.4.3.3. (Added) Temporary changes to MILs for dispatchable CTKs due to damaged, removed or replaced items will be legibly annotated in pen/ink on the MIL that accompanies the CTK.
- 10.2.1.4.3.3.1. (Added) TAS must be updated to reflect all changes to the MIL. The pen/ink changes on the dispatchable MIL must match TAS at all times.
- 10.2.1.4.3.3.2. (Added) Damage to items that does not render them unserviceable will be legibly annotated in ink on the MIL immediately to the right of the item nomenclature by the individual who discovered the damage.
- 10.2.1.4.3.3.2.1. (Added) The individual will enter their last name and the date the damage was discovered.
- 10.2.1.4.3.3.2.2. (Added) If the entry cannot be legibly made in the available space, an updated MIL will be printed.
- 10.2.1.4.3.4 (Added) Sections requiring the placement of hazardous materials in a CTK (i.e.: grease, oil, paste, adhesives, etc.) will ensure AF Form 3952 and appropriate MSDS is on file. CTK custodians will control and manage shelf life items IAW AFMAN 23-110.

- 10.2.1.4.4. (Added) Hazardous Materials.
- 10.2.1.4.4.1. (Added) Hazardous materials placed in CTKs will have a 9-digit TAS identifier marked on each individual item. The only exception will be one-time-use items that are required to be tracked in TAS but will be consumed after issue and are not required to be returned for proper disposal, i.e. epoxy packets. These items only require accurate accounting of "on-hand" quantity in TAS. The bin, box, or container storing the items will have a TAS ID.
- 10.2.1.4.4.2. (Added) Physical inventory will match TAS by TAS ID(s). Once the product has been used or is deemed unserviceable, the item will be consumed in TAS to show accurate inventory. Before disposal of item, the TAS ID marking on item will be removed.
- 10.2.1.4.4.3. (Added) Do not etch flammable containers with either manual or electrical etcher. These items will be stenciled or permanently marked by non-electrical means.
- 10.2.1.4.4.4. (Added) Shelf-Life/recurring inspections required for products can be tracked in TAS.
- 10.2.1.5. CTKs and/or all associated equipment will be transferred at the job site only for contingencies, exercises, or during heavy maintenance. The production superintendent is the lowest level of authority to approve CTK turnover on the flight line. All tools/equipment approved for on-site turnover must be returned to the owning support section every 24 hours for inventory unless signed out on a long-term basis.
- 10.2.1.7.1. (Added) Use unit WWID list, (**Attachment 27**) and refer to AFI 21-101 for tool identification and marking.
- 10.2.1.8.1. (Added) PPE will track issue to prevent FW&A. Reflective belts, respirators, ear defenders, headsets, safety glasses, whistles etc. will be marked with owners first name initial, full last name and employee number (i.e., J. Doe, 1234). If no employee number is assigned, use the member's organization.
- 10.2.1.8.2. (Added) Individually issued equipment will be accounted for by the owning individual. If an individually issued item is discovered missing, report it as a missing item using lost tool/object reporting procedures.
- 10.2.1.8.3. (Added) Personal bunny suits and booties are not authorized. Bunny suits and overshoe protectors (booties) used for maintenance or inspection of intakes are controlled items. Support sections are responsible for the issue and control of bunny suits and booties. Bunny suits will not be worn except for their intended use.
- 10.2.1.9.3. (Added) Rag Control.
- 10.2.1.9.3.1. (Added) Rag control applies to organizations and personnel performing equipment, aircraft and engine maintenance. The word "rag" refers to both shop rags and canopy cleaning cloths. Rags will be considered a tool and reported as a lost tool when unaccounted for.

Complete accountability of rags will be accomplished by support personnel at the beginning and end of each shift.

- 10.2.1.9.3.2. (Added) Rags will be of uniform size. Canopy cloths will be cut to a standard size to ease in determining if all the cloth issued is returned. All prepackaged or individual rags will be accounted for. If rags are in need of replacement, the soiled ones may be returned to support section and exchanged on a one-for-one basis. When a CTK is returned to support, the support personnel will replace any soiled rags one-for-one with clean rags.
- 10.2.1.9.3.3. (Added) Rags may be added to CTKs or signed out as a prepackaged kit with a designated amount of rags. Rags added to the CTK will have the quantity clearly marked, and added to the CTK inventory.
- 10.2.1.10.1 (Added) Appointed CTK custodians and alternates submit tool purchase requests. The purchase will be executed through the units GPC holder or RA as applicable.
- 10.2.1.11.1. (Added) Local manufacturer procedures.
- 10.2.1.11.1. (Added) Requestors initiate an MXG Form 8 requesting authorization to locally manufacture and use a particular tool or piece of equipment.
- 10.2.1.11.1.1. (Added) It must include full justification for the tool and a description of the use for each item. It must also list all applicable diagrams and TO references and include pictures or drawings or any other supporting information as attachments.
- 10.2.1.11.1.2. (Added) FOL/CC will approve all locally manufactured tools for their location.
- 10.2.1.11.1.3. (Added) The QA local manufacture program monitor copies all documents associated with the request files the copies and forwards all original documents to the initiator.
- 10.2.1.11.1.4. (Added) QA and the owning work center ("the user") will maintain records of all approved locally designed tools and equipment.
- 10.2.1.12.1. (Added) DFTs and CFTs will:
- 10.2.1.12.1.1. (Added) Establish a separate support section in the functional area for the duration of the field activity or incorporate with the host unit's support section.
- 10.2.1.12.1.2. (Added) Control tools IAW AFI 21-101 and this instruction. If a separate CTK custodian is not assigned, the senior person will assure CTK custodian responsibilities are met. The custodian will be briefed on local CTK/lost tool procedures by the host AMU or MXS support section chief.
- 10.2.1.13.1. (Added) If two or more sections are required to operate from one support section, the largest section will be designated as lead unit. Additional sections will incorporate tools and equipment into the lead units TAS system when practical. Other means of sign-

- out/accountability is authorized to meet mission needs. Support section/manning responsibilities will be determined as agreed upon by sections involved.
- 10.2.1.14.1. (Added) Crash Recovery CTKs.
- 10.2.1.14.1.1. (Added) Crash recovery equipment in Emergency Response Vehicles (ERV), trailers, and mobility kits will be considered a CTK. They will have a nine digit CTK number assigned and follow dispatchable CTK guidance in this instruction.
- 10.2.1.14.1.2. (Added) Equipment contained in trailers, mobility kits, and ERV will not be used for routine aircraft maintenance.
- 10.2.1.14.1.3. (Added) Keys for trailers and kits will be secured in the work center when not in use, and controlled using TAS.
- 10.2.1.14.1.4. (Added) Equipment keys will remain with ERV keys during the duty day, then secured in the work center when not in use.
- 10.2.1.14.1.5. (Added) Positive control of equipment will be maintained through the MIL and TAS.
- 10.2.1.14.1.6. (Added) CAF Form 140 and MIL will be maintained in the work center to document use of equipment, inventories, and inspections.
- 10.2.1.14.2. (Added) Hydrazine Response CTKs.
- 10.2.1.14.2.1. (Added) Hydrazine response equipment/tools contained within assigned response vehicles will be considered a dispatchable CTK and have nine digit CTK numbers assigned to them and follow dispatchable CTK guidance in this supplement.
- 10.2.1.14.2.2. (Added) All hydrazine response CTK items will be completely inventoried upon beginning and completion of each hydrazine response or routine aircraft maintenance task. Shift change inventories will be completed and documented in TAS by the CTK custodian.
- 10.2.1.15.1. (Added) On occasions where one person is at work in a section, the CTK will be signed out in TAS. The production superintendent or weekend supervisor will perform an inventory of the CTK/equipment upon turn-in.
- 10.2.1.16.1. (Added) Access will be limited to personnel on the applicable tool room access letter. The tool room will be secured when unattended.
- 10.2.1.17.1. (Added) The NCOIC will assign a primary and alternate CTK monitors.
- 10.2.1.17.2. (Added) The CTK monitors will:
- 10.2.1.17.2.1. (Added) Ensure all shop personnel are familiar with AFI 11-301 Vol 1, ACC Sup1

- and chapter 13 for CTK accountability.
- 10.2.1.17.2.2. (Added) Conduct an inventory of all shop CTKs annual and when appointed.
- 10.2.1.17.2.3. (Added) Ensure all technicians sign for kit items on the applicable CAF Form 140/146.
- 10.2.1.17.3. (Added) The dispatchable (flight line) CTK will be inventoried before leaving the shop, prior to entering the aircraft, upon leaving the aircraft, and upon returning to the shop. Annotate the CAF Form 140 as follows:
- 10.2.1.17.3.1. (Added) Fill in CTK number in upper right corner.
- 10.2.1.17.3.2. (Added) Before leaving the shop:
- 10.2.1.17.3.2.1. (Added) Enter date and employee number, (tool number remains blank).
- 10.2.1.17.3.2.2. (Added) Enter "flight line" in the "destination" block.
- 10.2.1.17.3.2.3. (Added) Enter time/signature in "out" block.
- 10.2.1.17.3.3. (Added) Upon returning to the shop, enter time/signature in "in" block.
- 10.2.1.17.3.4. (Added) Before entering the aircraft:
- 10.2.1.17.3.4.1. (Added) Enter date and employee number, (tool number remains blank) as a separate entry (must be accomplished at each aircraft).
- 10.2.1.17.3.4.2. (Added) Enter aircraft tail number (i.e. A1086) in "destination" block.
- 10.2.1.17.3.4.3. (Added) Enter time/signature in "out" block.
- 10.2.1.17.3.5. (Added) Before departing the aircraft, enter time/signature in "in" block.
- 10.3.9. Remove spare bulbs from flashlights.
- 10.3.15. (Added) Cadmium-Free Tools.
- 10.3.15.1. (Added) Stamp or etch an "X" after the CTK number on all hand tools certified as cadmium free and suitable for use on applicable areas of the U-2 aircraft. Example: BDMX00001X.
- 10.3.15.2. (Added) Accomplish positive certification of tools as cadmium free only by a chemical test. It is the responsibility of the owning work center to ensure that all tools are tested IAW TM 1U-2S-23 prior to placement in the CTK. This check must be documented in TAS. Initial testing is waived on tools certified as cadmium-free by the manufacturer.

- 10.3.15.3 (Added) Work center supervisors ensure all tool boxes/CTKs are stenciled with a minimum of 1/2 inch letters of a contrasting color with the following warning: WARNING FOR USE ON CADMIUM-FREE ACFT/EQUIP ONLY
- 10.3.15.4. (Added) Do not use cadmium-free tools for any purpose other than maintenance on U-2 aircraft.
- 10.3.15.5. (Added) Do not store cadmium-free tools in the same location (i.e. the same drawer of a CTK) with tools containing cadmium or uncertified tools. However, cadmium-free tools may be stored in a separate drawer of CTK provided all other requirements of this instruction are met.
- 10.3.15.6. (Added) Conduct a chemical test every 6 months on cadmium-free CTKs to ensure that no traces of cadmium exist. Document this test in TAS. Replace or decontaminate tools that fail the cadmium test.
- 10.3.15.7. (Added) If otherwise serviceable, tools that fail the cadmium test may be used in non-cadmium-free CTKs when re-etched to the appropriate CTK.
- 10.4.2.1. The lead technician will ensure tool accountability of open launch CTKs prior to aircraft engine start.
- 10.5.6. Removal of EID for unserviceable warranty tools awaiting repair or replacement may be accomplished once the company representative evaluates the unservisable tool and validates the warrantee status. If not removed while in storage, the tool EID must be tracked on an unserviceable warranty tool log.
- 10.7.1.2. Tool kits located within the MUNS controlled area are also considered controlled.
- 10.8.1. Utilize lost tool/object flow chart, (Attachment 28).
- 10.8.1.1. (9 MUNS, notifies munitions control and initiates the CAF Form 145). Items/tools dropped in an inaccessible area will be treated as a lost item/tool and will follow the same procedures.
- 10.8.1.1.1 (Added) If the lost item poses a threat to other aircraft that might taxi through the affected area, MOC will inform the 9 MXG/CC (or FOL equivalent), 9 OG/CC (or FOL equivalent) and base operations so taxi routes can be adjusted.
- 10.8.1.2. Include any markings or CTK number.
- 10.8.1.3. FOLs that do not operate a MOC, the Expediter/Production Superintendent will immediately notify QA and the unit's operations officer/maintenance superintendent.
- 10.8.1.3.1. (Added) The production superintendent will initiate a "QUICK FREEZE" and stop all maintenance activity on the affected aircraft/equipment and in the immediate area. (9 MUNS,

- QUICK FREEZE procedures do not apply)
- 10.8.1.4. Search period will not exceed 2-hours.
- 10.8.1.5 The individual(s) identifying the missing item, will fill out and route the CAF Form 145, and ensure the assigned control number is entered on the form,(control number and forms N/A for 9 MUNS). The unit's operations officer/maintenance superintendent will ensure the CAF Form 145 is completed, filed, and a copy faxed or hand delivered to QA within 5 days. (9 MUNS, maintenance supervision reviews all lost tool reports for determination of gross negligence and report of survey requirements and ensures lost tool reports are filed IAW flight/section files maintenance plan). The Wing FOD Monitor will track all lost tool and object reports in sequential order by the lost tool and object control number (N/A for 9 MUNS CAF Form 145s).
- 10.8.1.6. All QUICK FREEZE actions are considered complete if the tool/object is found during the 2-hour search period.
- 10.8.1.7.1. (Added) MOC will complete a lost tool/object incident notification checklist and assign a control number to the lost tool/object if the tool/object is not found within the 2-hour search period.
- 10.8.1.7.1.1. (Added) The lost tool/object control number is a six digit number.
- 10.8.1.7.1.1.1 (Added) The first two digits will be the year, the next two are the month, and the last two will be the sequential number of the missing item for that particular month. (i.e., for the first missing item in December 2007 the number will be annotated as 071201.)
- 10.8.1.7.2.. (Added) MOC will provide this number to QA during notification of the lost tool/object.
- 10.8.1.8. The tool custodian will ensure the documentation of missing tool is correct in TAS and on the MIL or contents listing.
- 10.8.1.12. (Added) If aircraft or support equipment is involved, personnel with impound authority will make the decision to impound. The decision will be relayed through MOC which will then notify QA and production superintendent and AMU/squadron supervision.
- 11.2. Will produce a due-in from maintenance (DIFM) slide depicting DIFM status.
- 11.21.1. (Added) Repair facility section/shop chiefs will actively investigate replacement parts with estimated delivery dates (EDD) greater than 60 days.
- 11.21.1.1. (Added) Supply assistance letters will be accomplished to accelerate delivery of parts when mission capability is negatively impacted. This applies to all items negatively impacting mission capability, not only those with EDDs of over 60 days.
- 11.21.1.2. (Added) End items/LRUs with replacement parts projected for delivery more than 180 days from the time ordered will be considered for disposition as NRTS code 4 for lack of parts.

- 11.22.3. (Added) Ensure all items are accounted for on an AF IMT 2520, *Repair Cycle Control Log*, or an automated system approved by squadron maintenance supervision.
- 11.22.3.1. (Added) Ensure 2-level maintenance assets designated not-repairable-this-station (direct-NRTS) are processed for turn in within 24 hours of removal from the aircraft or end item.
- 11.22.3.2. (Added) Contact the pick-up and delivery function at first availability if the function is off shift when the item is ready for turn in.
- 11.22.4. (Added) LRUs/parts identified by end users (AMU, phase, etc.) as requiring local repair will be entered into IMDS and a screen #122 printed to accompany the item to the repair facility.
- 11.22.4.1. (Added) LRUs/parts requiring repair will be transported with a completed AFTO Form 350 and screen #122 to the repair shop within 12 hours of the determination local repair is authorized. The paperwork will remain with the part for duration of repair cycle.
- 11.22.4.2. (Added) The repair facility will determine if item is within repair capability, if a repair is possible with depot-level approval, or if the item must be turned in for higher level repair/salvage.
- 11.22.5. (Added) Assets will be placed in secure area with only authorized personnel having access.
- 11.23.1. (Added) Repair shops will log all items delivered for repair on an AF IMT 2520 or automated system approved by squadron maintenance supervision. If an automated system is utilized, it will be standardized for all repair facilities in the squadron.
- 11.23.2. (Added) Section/shop chiefs with authorized repair capability must monitor status of reparable assets to determine if cross-cannibalizing components is feasible to return serviceable assets to the supply system.
- 11.23.3. (Added) All levels will consider feasibility of repairs under the Air Force Repair Enhancement Program before shipping/disposing of parts.
- 11.23.4. (Added) IMDS will be completed by repair technician and entries on AF IMT 2520 or automated system verified before item is returned to using agency or supply stocks. It is imperative the correct information is entered for a record of accountability.
- 11.23.5. (Added) Items determined non-repairable locally or requiring salvage will be processed by the shop that determines the condition as NRTS.
- 11.23.6. (Added) Personnel in the organization that turned in the part will verify reparable assets are properly transferred through supply channels on D23, *Repair Cycle Asset Management Listing*, within 48 hours.

- 11.24.7. (Added) Tail number/FOM bins will be inventoried the last workday of each week by the end of day shift.
- 14.4.2.1. (Added) Each required flight OIC/NCOIC will initiate an Inlet/Intake/Exhaust Certifying Official Appointment Letter and CAF Form 64 and route to the 9 MXG/CC or FOL equivalent for approval. Each unit requiring certifiers will have a minimum of one technician appointed to cover their requirements.
- 14.4.3.3. (Added) Prior to placement on SCR, F118 (U-2), 039063 (RQ-4), maintenance personnel will attend the Inlet/Intake/Exhaust Inspection training course by the MTF or FOL equivalent.
- 14.4.3.4. (Added) Upon completion of applicable course, maintenance personnel will be required to accomplish an initial inlet/intake/exhaust inspection, verified by a 9 MXG/CC appointed Inlet/Intake/Exhaust Certifying Official or FOL equivalent.
- 14.4.4.2. (Added) Member must receive initial certification within 180 days of formal course completion. If member fails to be certified within 180 days they must re-attend class.
- 14.4.4.3. (Added) Supervisors/certifiers/individuals must complete and route a CAF Form 64 along with the personnel's TBA records to the Squadron Maintenance Superintendent/MOO (Group Superintendent for 9 MOS or 9 MXG staff personnel) for SCR approval and then to the UTM for IMDS/CAMS update.
- 14.4.4.4. (Added) All personnel who go overdue on their annual recertification will be decertified. Personnel will not accomplish any inlet/intake/exhaust inspections until properly recertified, and updated in IMDS/CAMS.
- 14.4.4.5. (Added) Supervisors/certifiers/individuals will ensure the Training Business Area or other relevant training record is properly documented to reflect current qualification/certification status.
- 14.6.2. See Para 3.4.1.53.
- 14.8.3. The 9 AMXS MOO/MX SUPT or FOL equivalent are responsible for the overall management of their respective CANN programs.
- 14.8.4.1. (Added) Production superintendents will be the lowest supervision level with approving authority for CANN actions. When a CANN is deemed necessary, the production superintendent will immediately notify the MOC, the flight line supply element (FLSE) and production superintendent overseeing support shop maintenance if the aircraft is under control of a non-flight line maintenance function, i.e., inspection section.
- 14.8.4.2. (Added) Production superintendents will coordinate CANN actions between units/flights when mission requirements dictate. When necessary, the coordination should be elevated to the respective MOO/SUPT or FOL equivalent.

- 14.8.4.2.1. (Added) For phase aircraft CANN, the flight line production superintendent will coordinate with the production superintendent or MX SUPT/MOO overseeing the phase inspection. No parts will be removed from the phase aircraft that will negatively impact inspection completion without 9 MXG/CC/CD/CEM or FOL equivalent approval.
- 14.8.4.2.2. (Added) For engine-to-aircraft CANNs, the flight line production superintendent will coordinate with the production superintendent overseeing support shop functions.
- 14.8.5. The AMXS MOO/MX SUPT or FOL equivalent will assign a CANN manager, (normally the DCC assigned to the aircraft) to oversee forms documentation and entries into IMDS.
- 14.8.11.1. (Added) The FLSE inputs CANN actions into IMDS after notification of a CANN by the production superintendent.
- 14.8.11.2. (Added) If the CANN is from an engine, propulsion inspection section will consult EM and will provide the FLSE with the engine serial number of the part donor. The receiving FL SE processes the CANN in IMDS, enters a Red X for the performing work center in order to print out at EM and transfers the document number to the engine shop.
- 14.8.11.3. (Added) The FLSE provides a job control number to the performing work center and processes the CANN in IMDS.
- 14.8.11.4. (Added) The FLSE will immediately notify the production superintendent after receipt of the replacement part. The production superintendent will decide whether the part will be installed or deferred.
- 14.8.11.5. (Added) The FLSE will utilize IMDS to defer installation.
- 14.8.12. (Added) Maintenance technician responsibilities.
- 14.8.12.1. (Added) The maintenance technician removing the part is responsible for completing the "T" action in IMDS, and documenting the action in the aircraft 781 series forms, to include document number and job control number.
- 14.8.12.2. (Added) The maintenance technician reinstalling the part is responsible for completing the "U" action in IMDS, and documenting the action in the aircraft 781 series forms, to include document number and job control number.
- 14.10.2.1. FOL's will publish and follow local IFE guidance.
- 14.10.2.2. (Added) 9 AMXS will provide initial response to declared IFEs for RQ-4 and U-2 aircraft. Applicable contractor will provide initial response to T-38 and MC-12 aircraft to declared IFEs. 9 MXS will only respond if the IFE results in an aircraft disabled on the active runway or a CDDAR event is initiated.

- 14.10.2.3. (Added) 9 AMXS will provide tow team coverage for RQ-4 and U-2 aircraft. Applicable contractor will provide tow team coverage for T-38 and MC-12 aircraft. If the IFE results in a CDDAR event 9 MXS will respond per this instruction.
- 14.13.1.1. (Added) The AMU OIC/MOO/SUPT or FOL equivalent is responsible for assigning qualified personnel to the pogo team and ensuring proper control of tools and equipment used by the team.
- 14.13.2.1. (Added) The pogo team supervisor will maintain radio communication with the control tower while in the controlled movement area and ensure clearance is given by control tower prior to proceeding on the runway.
- 14.14.2.1 (Added) Each unit requiring certifiers will have a minimum of one technician appointed to cover their requirements.
- 14.14.3.1. (Added) F118 (U-2) maintenance personnel will attend Field Training course J4AMP2A6X1AB41A (U-2 Engine Borescope/Blade Blend).
- 14.14.3.2. (Added) AE3007H (RQ-4) maintenance personnel will attend a training course by RQ-4 Air Force Engineering and Technical Services personnel.
- 14.14.5.2.1. (Added) Supervisors/certifiers/individuals must complete and route a CAF Form 64 along with the training records to the Squadron Superintendent/MOO (Group Superintendent for 9 MOS or 9 MXG staff personnel) for SCR approval and then to the UTM for IMDS/CAMS update.
- 14.14.5.2.1.1 (Added) Member must receive initial certification within 180 days of formal course completion. If member fails to be certified within 180 days they must re-attend class.
- 14.14.5.2.2. (Added) Prior to placement on the SCR.
- 14.14.5.2.2.1. (Added) U-2 maintenance personnel will attend Field Training course J4AMP2A6X1AB41A (U-2 Engine Borescope/Blade Blend).
- 14.14.5.2.2.2. (Added) RQ-4 maintenance personnel will attend Field Training course AE3007H FLEX BS CRS (RQ-4 Engine Borescope) or FOL equivalent. RQ-4 Blade Blend will be conducted by AFETS only.
- 14.14.5.2.2.3. (Added) Supervisors/certifiers/individuals must complete and route a CAF Form 64 along with the training records to the Squadron Superintendent/MOO (Group Superintendent for 9 MOS or 9 MXG staff personnel) for SCR approval and then to the UTM for IMDS/CAMS update.
- 14.14.5.2.2.4. (Added) Supervisors/certifiers/individuals will ensure training records are properly documented to reflect current qualification/certification status.

- 14.14.8.1.1. (Added) All FOD and blade blend repair actions will be loaded in IMDS/CAMS.
- 14.14.8.1.2. (Added) All FOD to installed engines will be identified and annotated in the aircraft AFTO Forms 781A. If more than one blade is due inspection, each blade will have its own discrepancy.
- 14.14.8.1.2.1. (Added) If the damage is within limits, the certified blade blend technician will document it in the AF Form 781A on a red dash for the applicable blade number.
- 14.14.8.1.2.2. (Added) If the damage is not within limits, a Red X discrepancy will be entered in the AF Form 781A. A qualified technician will blend the damage and sign off the corrected by block. A second qualified blade blend technician will inspect the blend and sign off the inspected by block.
- 14.14.8.2.1. (Added) All FOD to uninstalled engines will be identified and annotated on the Blade Blend/FOD Damage worksheet in the work package and loaded in IMDS/CAMS against the engine S/N for each applicable blade number.
- 14.14.8.2.1.1. (Added) If the damage is within limits, the inspecting technician will sign off the damage in the work package daily summary as serviceable.
- 14.14.8.2.1.2. (Added) If the damage is not within limits, a qualified technician will blend the damage and sign off the blend in the daily summary. A second qualified blade blend technician will inspect the blend and sign off the inspection of the blend in the work package daily summary.
- 14.14.8.4. (Added) Deployed Procedures.
- 14.14.8.4.1. (Added) Deployed aircraft maintenance units (AMU) are responsible for notifying the deployed MOC and deployed FOD Monitor of any discovered/suspected FOD.
- 14.14.8.4.2. (Added) If MOC or FOD Monitor is not deployed with the AMU, notify the host unit and home station MOC. MOC will notify the 9 RW FOD/DOP Manager and home station Engine Manager about any discovered/suspected FOD within 24 hours.
- 14.14.8.5. (Added) If the damage is within limits, the certified blade blend technician will document it in the AF Form 781A on a red dash for the applicable blade number.
- 14.14.8.6. (Added) If the damage is not within limits, a Red X discrepancy will be entered in the AF Form 781A. A qualified technician will blend the damage and sign off the corrected by block. A second qualified blade blend technician will inspect the blend and sign off the inspected by block.
- 14.14.8.7. (Added) All FOD to uninstalled engines will be identified and annotated on the Blade Blend/FOD Damage worksheet in the work package and loaded in IMDS/CAMS against the engine S/N for each applicable blade number.

- 14.14.8.7.1. (Added) If the damage is within limits, the inspecting technician will sign off the damage in the work package daily summary as serviceable.
- 14.14.8.7.2 (Added) If the damage is not within limits, a qualified technician will blend the damage and sign off the blend in the daily summary. A second qualified blade blend technician will inspect the blend and sign off the inspection of the blend in the work package daily summary.
- 14.15.7.4. (Added) MTF will maintain certification records for initial and annual engine run certifications.
- 14.15.7.5. (Added) Use the following IMDS course codes:
- 14.15.7.5.1. (Added) Inlet/Intake/Exhaust Certification: U-2 003629/RQ4 003363; this course is a pre-requisite for engine-run certification.
- 14.15.7.5.2. (Added) Formal Training Engine Operation course: U-2 310715/RQ-4 039062
- 14.15.7.5.3. (Added) Initial Certification: U-2 022113/RQ-4 020134
- 14.15.7.5.4. (Added) Engine Run 90-Day Requirement: U-2 020138/RQ-4 020137
- 14.15.7.5.5. (Added) Engine Annual Certification: U-2 003633/RQ-4 003364
- 14.15.7.5.6. (Added) Engine Run Certifier: U-2 003630/RQ-4 004202
- 14.17.2.1. (Added) Each unit requiring certifiers will have a minimum of one technician appointed to cover their requirements.
- 14.17.4.2. (Added) Prior to placement on SCR:
- 14.17.4.2.1. (Added) F118 (U-2) maintenance personal will attend FT course J4AMP2A6X1AB41A (U-2 Engine Borescope/Blade Blend).
- 14.17.4.2.2. (Added) RQ-4 maintenance personal will attend a training course by the RQ-4 AFETS personnel or FOL equivalent.
- 14.17.4.2.3. (Added) Member must receive initial certification within 180 days of formal course completion. If member fails to be certified within 180 days they must re-attend class.
- 14.17.4.3. (Added) Supervisors/certifiers/individuals must complete and route a CAF Form 64 along with the technician's training records to the Squadron Superintendent/MOO to add the person to the SCR (Group Superintendent for any 9 MOS or 9 MXG personnel) and then to the UTM for IMDS/CAMS update.
- 14.17.6.4. (Added) Initial Certification.

- 14.17.6.5. (Added) Borescope Certifier.
- 14.19.2.1.1. (Added) Securing pins, safety pins and clips, diaper pins, etc. will be installed in holes/slots when not in use to prevent loss or damage, e.g., pins with clips to the engine roll kit and rails, aircraft cart pins, wing stand pins, etc.
- 14.19.2.1.2. (Added) These types of pins will be secured with a lanyard.
- 14.19.2.1.2.1. (Added) Safety wire will not be used as a lanyard for caps/plugs or pins.
- 14.19.2.3. All open ports of aircraft parts and associated support equipment will be capped/plugged when not in use to prevent FOD migration.
- 14.19.2.3.1. (Added) Intake/exhaust plugs/covers, and aircraft port covers will be kept in good condition and only used for their designed function.
- 14.19.2.3.2. (Added) They will only be removed when performing intake or exhaust inspections/maintenance, when engines are to be operated or upon crew ready time.
- 14.19.2.3.3. (Added) Covers will be immediately reinstalled when these conditions no longer exist.
- 14.19.2.3.4. During engine runs and prior to aircraft taxiing, all aircraft covers will be stowed, firmly secured, or removed from the run-up area to prevent ingestion.
- 14.19.2.6.1. Beyond the FOD check area; this applies whether attached to headgear or any other uniform item. This does not apply to name tags/badges attached to a blue uniform when worn by group/squadron/unit leadership on days designated for wear of a blue uniform during response to emergencies/incidents.
- 14.19.2.6.5. (Added) Hats will not be worn on the flight line except as follows:
- 14.19.2.6.5.1. (Added) During cold weather months, (Oct-Mar) the watch cap may be worn on the flight line, but must be removed prior to approaching within 50 feet of any operating aircraft engine.
- 14.19.2.6.5.2. (Added) The 9 MXG/CC may authorize hats that protect personnel from the effects of extremely hot weather but must be removed prior to approaching within 50 feet of any operating aircraft engine. Send copy of authorization to 9 OSS Airfield Manager.
- 14.19.2.6.5.3. (Added) Security Forces may wear the beret; however, when they are within 50 feet of an operating aircraft their berets must be removed and secured.
- 3.17.6. Hats will not be worn on the airfield. 9 Maintenance Group Commander (9 MXG/CC) may authorize hats that protect personnel from the effects of extremely cold or hot weather; send

copy of authorization to 9 OSS Airfield Manager

- 14.19.2.8.1. (Added) FOD containers will be available when maintenance is performed on aircraft or associated systems/equipment. FOD pouches contained within a CTK will be considered suitable for filling this requirement.
- 14.19.2.8.2. (Added) FOD containers will be stenciled with the word "FOD" in no less than 2" letters with exception of CTK FOD pouches; FOD pouches will be clearly marked with a permanent marking in letters at least 1/2-inch tall.
- 14.19.2.8.3. (Added) All FOD containers regardless of size and location, including trash receptacles, will be emptied daily or when full.
- 14.19.2.8.4. (Added) FOD containers for small vehicles, e.g., golf cart type or mobiles, may use a forms pouch that can be closed, secured and labeled. It must be labeled as indicated above.
- 14.19.2.8.5. (Added) Vehicle FO containers will be secured to prevent tipping over.
- 14.19.2.8.6. (Added) Vehicles driven on the flight line more than once a week will have a tire FOD removal tool (can opener or equivalent) attached to the key ring with the vehicle's registration number permanently marked on it.
- 14.19.2.9.1.1. (Added) Structural maintenance shops will utilize a local Intake Maintenance and Rivet Replacement checklist on the job site during any intake maintenance.
- 14.19.2.9.1.2. (Added) Recover and account for all rivet heads, stems, washers and shavings during each procedure and after all maintenance is accomplished.
- 14.19.2.9.1.3. (Added) Control and account for all work order residue for intake maintenance prior to and after maintenance is complete.
- 14.19.2.9. Control removed hardware used on or around aircraft and uninstalled engines.
- 14.19.2.9.2 (Added) Attach screw bags to removed parts/components. Document screw bag labels with Equipment I.D., nomenclature, quantity, employee number, and date. Example: Aircraft 80-1091, Panel R-2 screws, 18 each, 01234, 6 May 10.
- 14.19.2.11.1. (Added) FOD walk responsibilities are as follows:
- 14.19.2.11.1.1 (Added) A Beale AFB FOD walk will be held at least annually. This will be coordinated and scheduled by the WG FOD monitor.
- 14.19.2.11.1.1. (Added) All 9 RW units will participate.
- 14.19.2.11.1.1.2. (Added) Inspection areas will be the runways, all taxi ways and ramps.

- 14.19.2.11.1.1.3. (Added) Supervisors will ensure personnel are spaced no more than 10 feet apart and personnel are not dismissed until areas are FOD free.
- 14.19.2.11.1.1.4. (Added) Close attention will be given to expansion joints, seams, and grounding points for small stones, deteriorating concrete and loose tar during all FOD walks/inspections.
- 14.19.2.11.1.5. (Added) When FOD is discovered on the flight line, the area will be cleaned immediately. If debris is excessive, personnel will contact MOC or Base Operations to request sweeper dispatch.
- 14.19.2.11.1.2. (Added) FOD walks will be conducted in and around each aircraft parking area prior to the start of each flying day.
- 14.19.2.11.1.2.1. (Added) 9 MXS:
- 14.19.2.11.1.2.1.1. (Added) Fabrication: wash rack out to center-line of taxiway H.
- 14.19.2.11.1.2.1.2. (Added) Fuel shop: Dock 4 out to center-line of taxiway H.
- 14.19.2.11.1.2.1.3. (Added) Phase: Dock 2 out to center-line of taxiway H.
- 14.19.2.11.1.2.2. (Added) 99 AMU (99 RS).
- 14.19.2.11.1.2.2.1. (Added) Specialists: Dock 3 out to center-line of taxiway H.
- 14.19.2.11.1.2.2.2. (Added) APG/Specs: U-2 ramp, U-2 shelters and 99 AMU support section parking lot.
- 14.19.2.11.1.2.3 (Added) 12 AMU (12 RS).
- 14.19.2.11.1.2.3.1 (Added) APG/Specs: Dock 6 out to center-line of taxiway H, RQ-4 launch area on taxiway Bravo, two-bay hangars on the flight line and RQ-4 parking spots/ramp in front and across from the two-bay hangars. As applicable, J & K shelters" after "RQ-4 launch area on taxiway Bravo.
- 14.19.2.11.1.2.3.2. (Added) Ground communication: Inside of the LRE and MCE shelters. Note: General housekeeping will be maintained inside the MCE and LRE compound.
- 14.19.2.11.1.2.4. (Added) T-38. Areas surrounding/inside Dock 7, T-38 parking ramp and trim pad.
- 14.19.2.11.1.2.5. (Added) Transient Alert/Support Division. Transient parking area IAW service contracts.

- 14.19.2.11.1.2.6. (Added) The owning/using agency is responsible for keeping the following areas FOD free: Alert pad, including Taxiway A, Taxiway M, mass parking area (old KC-135 ramp), Dock 4 and Dock 5.
- 14.19.2.11.1.2.7. (Added) FOLs will comply with local FOD policy.
- 14.19.2.14.1. (Added) Ensure aircraft cockpits remain FOD free at all times. Remove all items from pockets and any objects that are not secured or could fall off without notice prior to cockpit entry.
- 14.19.2.14.2. (Added) Perform a thorough FOD check after exiting the cockpit. If small pieces of debris are present, the cockpit will be vacuumed.
- 14.19.2.14.3. (Added) If any items are lost in the cockpit and cannot be found; follow lost tool/object procedures in section 10.3.25 of this instruction. If item is still not recovered after a thorough search, the cockpit must be thoroughly vacuumed.
- 14.19.2.17.1. (Added) During hours of darkness a flashlight will be used for vehicle inspections. Flashlights can be assigned to the vehicle, labeled with the vehicle ID number, and will not be removed from the vehicle for any other purpose.
- 14.19.2.17.2. (Added) Pintle hook pins of all types will be secured by cable and swage or chain to the pintle hook. Pins will be installed in pintle hook at all times.
- 14.19.2.17.3. (Added) Driving on taxiway shoulders is prohibited except for clearance of aircraft. This is due to increased degradation of the blacktop and increased FOD hazards. If blacktop shoulder is driven on, you must complete another FOD check of the vehicle tires immediately upon return to the concrete taxiway.
- 14.19.2.18.1. Unused screw holes will be filled with sealant.
- 14.19.2.19. Vehicle designation letter will be kept by the wing FOD manager. Magnetic bars will be installed at an optimum height of six to eight inches and will be checked and made FOD free prior to entering flight line areas.
- 14.19.2.25. (Added) Each unit possessing towable sweepers e.g., FOD Boss, will develop a plan for sweeper usage.
- 14.19.2.25.1 (Added) AGE will be inspected for foreign objects after service inspection (near SI area) and tires prior to dispatch to flight line and /or using organizations.
- 14.19.3.1. Propulsion flight chief will ensure the 9 RW FOD/DOP monitor's responsibilities are met in his/her absence.
- 14.19.3.2.9. Serve as the 9 RW Dropped Object Prevention Program (DOPP) Manager.

- 14.19.4.8. (Added) Be the point of contact for all 9 RW FOD/DOPP issues, to include incidents and prevention measures at FOLs.
- 14.19.4.9. (Added) Organize the quarterly 9 RW FOD meeting, brief quarterly results in the meeting and forward meeting minutes to all required attendees.
- 14.19.4.10. (Added) Serve as the point of contact for planning and execution of base FOD walks.
- 14.19.4.11. (Added) Immediately notify the 9 RW/CV of all known damage and details from FOD/DOPP incidents.
- 14.19.4.12. (Added) Be the point of contact for all 9 RW Lost Tool/ Object issues. Maintain original copies of Lost Tool/ Object reports for one year.
- 14.19.4.13. (Added) Ensure all FOD damage to aircraft engines is tracked by 9 MOS/MXOOE (Engine Management) in the Comprehensive Engine Management System and Integrated Maintenance Data System AFTO Form 95, *Significant Historical Data*, for the applicable engine's historical records.
- 14.19.4.14. (Added) Attend pre-construction briefings for airfield construction/repairs.
- 14.19.4.15. (Added) Conduct an investigation of all FOD/DOPP incidents as directed in FOD investigation and reporting, (14.19.5.)
- 14.19.5.1.1. The FOD monitor will conduct an investigation of all FOD/DOPP incidents to determine if the incident was a preventable FOD incident and chargeable to the wing FOD rate. Results of the investigation will be briefed to the 9 RW/CV, and then sent to all aircraft supervision for the affected MDS for future prevention.
- 14.19.5.1.1.1 (Added) Send an initial report to the ACC FOD Manager within 24 hours with a courtesy copy to the 9 RW/CV. The following information, at a minimum, is needed prior to initial reporting:
- 14.19.5.1.1.1. (Added) MDS.
- 14.19.5.1.1.1.2. (Added) Tail number.
- 14.19.5.1.1.1.3. (Added) Engine S/N.
- 14.19.5.1.1.4. (Added) Location of damage (1st, 2nd, 3rd stage fan blade, stator etc.).
- 14.19.5.1.1.5. (Added) Extent of damage known (this can be updated after complete inspection of engine).
- 14.19.5.1.1.1.6. (Added) Date/time damage was discovered.

- 14.19.5.1.1.2. (Added) In conjunction with QA, ensure the impoundment official for a suspected FOD incident follows all procedures.
- 14.19.5.1.1.3. (Added) Ensure digital imagery of the damage is captured and stored on corresponding MDS folder in MXG's share drive.
- 14.19.5.1.1.4. (Added). Ensure statements are taken immediately from all personnel involved in the incident. Record all information meeting the requirements listed in AFI 21-101 and the FOD incident worksheet, **Attachment 38**.
- 14.19.5.1.1.5. (Added) Ensure all FOD damage to aircraft engines is tracked by 9 MOS/MXOOE (Engine Management) in the Comprehensive Engine Management System and Integrated Maintenance Data System AFTO Form 95, *Significant Historical Data*, for the applicable engine's historical records.
- 14.19.5.1.1.6. (Added) Prepare and send a final report to the ACC FOD Manager when all data (cause, total damage, repair cost, etc.) has been collected. The following information will be included on the final report.
- 14.19.5.1.1.6.1. (Added). FOD control number.
- 14.19.5.1.1.6.2. (Added) MDS.
- 14.19.5.1.1.6.3. (Added) Tail number.
- 14.19.5.1.1.6.4. (Added) Engine serial number.
- 14.19.5.1.1.6.5. (Added) Complete scope of all damage identified/repaired.
- 14.19.5.1.1.6.6. (Added) Total cost data for damage repair. Note: if General Electric or Rolls Royce repairs the damage, total cost data will be provided through WRALC/LXAE and ACC/A8U4, respectively. If the engine is repaired locally, the 9 RW FOD Manager will calculate the cost using the hourly labor rates for repairs due to mishaps located on the Air Force Safety Center website, http://afsafety.af.mil/ and AFI 91-204, *Safety Investigations and Reports*, Para 1.9. The following items must be included for total cost data:
- 14.19.5.1.1.6.6.1. (Added) Cost of replacement parts.
- 14.19.5.1.1.6.6.2. (Added) Total man-hours for repair to include inspection, disassembly, repair and re-assembly
- 14.19.5.1.1.6.6.3. (Added) Man-hours for engine installation.
- 14.19.5.1.1.6.6.4. (Added) Man-hours for engine test bed operation (aircraft ground test run).
- 14.19.5.1.1.7. (Added) Attend pre-construction briefings for airfield construction/repairs.

- 14.19.5.1.1.8. (Added) Conduct spot inspections to ensure units are using sound FOD prevention practices, and that corresponding squadron/group QA is inspecting all aspects of FOD.
- 14.19.5.6.1. Send a courtesy copy to the 9 RW/CV. The following information, at a minimum, is needed prior to initial reporting:
- 14.19.5.6.1.1. (Added) MDS.
- 14.19.5.6.1.2. (Added) Tail number.
- 14.19.5.6.1.3. (Added) Engine S/N.
- 14.19.5.6.1.4. (Added) Location of damage (1st, 2nd, 3rd stage fan blade, stator etc.).
- 14.19.5.6.1.5. (Added) Extent of damage known (this can be updated after complete inspection of engine).
- 14.19.5.6.1.6. (Added) Date/time damage was discovered.
- 14.19.5.8.1. Deployed/FOL AMUs are responsible for notifying the deployed/FOL MOC and deployed FOD Monitor of any discovered/suspected FOD. If MOC or FOD Monitor is not with the AMU, notify the host unit and home station MOC. MOC will notify the 9 RW FOD/DOP Manager and EM about discovered/suspected FOD within 24 hours.
- 14.19.5.18. (Added) All damage, regardless of size and impact on serviceability, will be reported to 9 RW/CVF.
- 14.19.5.19. (Added) All aircraft sustaining FOD damage from an unknown cause will be considered for immediate impoundment.
- 14.19.5.20. (Added) Each FOD mishap will be investigated to ensure appropriate actions are taken to resolve any underlying problems.
- 14.19.5.21. (Added) If FOD damage is within repairable limits, every effort will be made to find the cause and track it locally for trend analysis.
- 14.19.5.22. (Added) FOL FOD Incidents.
- 14.19.5.22.1. (Added) QA personnel deployed to FOL's will be acting FOD monitor.
- 14.19.5.22.2. (Added) All FOD incidents to 9 RW aircraft at FOLs will be investigated by the host wing FOD monitor unless the function is not established or the FOD incident is the direct result of 9 RW deployed/assigned personnel.

- 14.19.5.22.3. (Added) The deployed MX officer-in-charge or superintendent will ensure that statements are taken immediately from all personnel involved in the incident.
- 14.19.5.22.4. (Added) The deployed/FOL FOD monitor will contact 9 RW/CVF of any FOD incident as soon as possible, but no later than 12 hours after occurrence. They will ensure the local and Beale AFB flight safety offices have been notified.
- 14.19.5.22. (Added) All photos and incident data will be forwarded to 9 RW/CVF within 24 hours.
- 14.19.6. Additional attendees are: 9 OG/CC, 99 RS/CC, 1 RS/CC, 9 OSS/OSAA, 12 RS/CC, 9 SD/SDSXE, 9 PSPTS/CC, 9 OSS/CC, T-38 Contract Representative, and Unit FOD reps or alternates. If a mandatory attendee is unable to attend the meeting, their deputy or alternate will attend.
- 14.19.8. (Added) DOPP.
- 14.19.8.1. (Added) All maintenance personnel involved in on-equipment maintenance will receive DOP training.
- 14.19.8.1.1. (Added) DOP training will be monitored by the 9 RW DOPP Monitor, and will include, but is not limited to:
- 14.19.8.1.1.1. (Added) Fastener awareness video shown in maintenance block training.
- 14.19.8.1.1.2. (Added) Inspection, installation, removal, and repair for aircraft panels, doors, access covers, etc.
- 14.19.8.1.1.3. (Added) Special attention will be placed on using the correct length fasteners (using tech data), checking the condition of nut plates, latches, and other securing devices.
- 14.19.8.1.1.4. (Added) Training will be accomplished during Maintenance Familiarization Training, (block training) and the unit in processing briefing for FOLs.
- 14.19.8.2. (Added) Reporting of Dropped Objects:
- 14.19.8.2.1. (Added) When a dropped object is discovered, MOC will immediately be notified. MOC or command post will then notify the 9 RW/CVF (Wing FOD/DOP), 9 MXG QA, 9 MXG/CC, 9 RW Safety and Base Operations.
- 14.19.8.2.2. (Added) All work in the affected area will cease, and any items related to the dropped object will be secured/impounded and available for the 9 RW DOP monitor, QA, or outside investigation team depending on the categorization of the incident. Work in the affected area will resume only after investigation official releases the area for maintenance.

- 14.19.8.2.3. (Added) If the 9 RW DOP monitor is not or will not be present within 24 hours of the DOP incident, QA will report the incident to ACC/A4MP via e-mail or by phone.
- 14.19.8.2.4. (Added) If a DOP incident involves casualties, property damage, or if adverse publicity is likely, report IAW AFMAN 10-206, *Operational Reporting*.
- 14.19.8.2.5. (Added) When a dropped object is discovered off-station, aircrew or maintenance personnel must immediately report the incident to the local MOC, base ops or command post so the affected area can be searched. The 9 RW Command Post will also be notified as soon as practical with aircraft type, tail number, item dropped and location of loss, if known. 9 RW Command Post will notify the 9 RW/CVF.
- 14.19.8.2.6. (Added) Upon notification of a dropped object, Airfield Management will immediately conduct a thorough search of the runways and taxiways to locate the missing item. The results of the search will be reported to 9 RW/CVF.
- 14.19.8.3. (Added) DO Investigation.
- 14.19.8.3.1. (Added) All DO incidents will be investigated in accordance with AFI 21-101, AFI 21-101 Combat Air Force SUP1, AFI 91-204, and this instruction. The 9 RW DOP monitor or QA will investigate each dropped object incident
- 14.19.8.3.2. (Added) When a DO incident occurs, the owning AMU will complete the DO incident worksheet, (Attachment 38) with help from 9 RW DOP, or deployed DOP monitors.
- 14.19.8.3.3. (Added) The completed DO incident worksheet will be sent to 9 RW DOP Monitor within 24 hours. Every effort will be made to ensure positive corrective action is accomplished.
- 14.19.8.3.4. (Added) If material deficiency is cause or suspected, a deficiency report will be submitted IAW T.O. 00-35D-54.
- 14.19.8.3.5. (Added) A formal DOP report will be sent by the 9 RW DOP monitor to ACC within 72 hours of the incident.
- 14.19.8.4. (Added) Deployed/FOL DOP Monitor:
- 14.19.8.4.1. (Added) A deployed QA representative will serve as the deployed DOP monitor.
- 14.19.8.4.2. (Added) The FOL QA FOD monitor will serve as the FOL DOPP monitor and keep a DOPP continuity book.
- 14.19.9. (Added) FOD Awards.
- 14.19.9.1. (Added) The "Golden Bolt" Program will utilize a plastic Golden Bolt that will be placed in various areas throughout the entire maintenance complex. Any individual locating the Golden Bolt will receive a 1-day pass for their awareness of FOD Prevention. Note: The Golden

- bolt will NEVER be left unattended to ensure it does not become a FOD hazard.
- 14.19.9.2. (Added) A FOD Poster Contest will be held annually to promote the FOD Prevention Program. Anyone assigned to the 9 RW or Beale AFB is eligible to participate.
- 14.19.9.2.1. (Added) Pictures depicting an act or actions, emphasizing FOD prevention can be submitted to the 9 RW FOD Monitor. Pictures should be creative and original in design.
- 14.19.9.2.2. (Added) The 9 RW/CV or representative will decide which poster most emphasizes and enhances the FOD Prevention Program.
- 14.19.9.2.3. (Added) The winner will receive a 3-day pass, an award, and the poster will be submitted at the National Aerospace FOD Prevention Conference. Posters will be submitted to 9 RW/CVF no later than June 15.
- 14.19.9.3. (Added) A FOD Fighter of the Month Award will be given to the individual who consistently displays the most impressive FOD prevention practices or is judged as finding the most significant FO in that particular month. The winner of this award will receive a certificate and a 1-day pass signed by the 9 RW/CV. They will also receive a FOD prevention coin.
- 14.19.9.4. (Added) A FOD Fighter of the Quarter Award will be awarded to the monthly winner that displayed the most impressing FOD prevention practices, or is judged as finding the most significant FO in that particular quarter. The winner of this award will receive a certificate and a 3-day pass signed by the 9 RW/CV. Beale AFB winners will also receive an incentive flight on a T-38 aircraft.
- 14.19.10. (Added) Airfield management will:
- 14.19.10.1. (Added) Control all ramp sweeper operations.
- 14.19.10.1.1. (Added) Sweeper Operations on Airfield:
- 14.19.10.1.2. (Added) Monday Runway and "F" Taxiway.
- 14.19.10.1.3. (Added) Tuesday T-38, U-2, and RQ-4 parking aprons to include behind and between the hangars.
- 14.19.10.1.5. (Added) Wednesday Runway and "B", "C", "D", "E", "G", "I" and "J" taxiways.
- 14.19.10.1.6. (Added) Thursday Runway 15 over-run, "A", "K", "H" and "L" taxiways.
- 14.19.10.1.7. (Added) Friday Runway, "M" taxiway and all entry control/FOD check-points to include access roads.
- 14.19.10.1.8.(Added) Driving on taxiway shoulders is prohibited except for clearance of aircraft, due to increased degradation of the blacktop and increased FOD hazards. If blacktop shoulder is

- driven on, another FOD check of the vehicle tires immediately upon return to the concrete taxiway.
- 14.19.10.1.9. (Added) Taxiway shoulders will be swept or washed on an as needed basis due to blacktop deterioration.
- 14.19.10.2. (Added) Monitor weeds growing out of taxiways/runway/ramps. Coordinate control of weeds through the 9th Civil Engineering Squadron.
- 14.19.11. (Added) 9 CES/CEP is responsible for briefing contractors on FOD prevention for all contracts with potential to impact the airfield or flight line environment, to include aircraft shelters and aircraft maintenance facilities.
- 14.19.11.1. (Added) Include these FOD prevention procedures at a minimum:
- 14.19.11.1.1 (Added) All equipment, tools and hardware needed to complete the job will be accounted for prior to and after any job.
- 14.19.11.1.2. (Added) All equipment, tools and hardware will be secured to ensure they are not lost during transportation to and from job site.
- 14.19.11.1.3. (Added) All contract vehicles must be cleaned/organized and inspected prior to entry into the flight line area to prevent unintentional deposit of loose/unsecured items.
- 14.19.11.2. (Added) The construction inspector will inspect construction sites for compliance with the FOD prevention program, and will identify potential FOD problems to the contracting officer for corrective action.
- 14.19.11.3. (Added) Airfield contracts will include the following in the statement of work:
- 14.19.11.3.1. (Added) The contractor is responsible for daily clean-up of worksite. Base operations will be notified if debris needs to be swept by vehicle sweeper outside fencing or barrier.
- 14.19.11.3.2. (Added) Fencing barrier (as applicable) installed around the work area will extend to the ground to prevent debris from blowing under the fence,.
- 14.19.11.3.3. (Added) Hats will not be worn on the flight line, unless it is required for safety.
- 14.19.12. (Added) 9th Physiological Support Squadron (PSPTS) will account for all assigned equipment prior to issue and when returned after flight. Any missing item will be reported as a lost object/tool.
- 14.19.13. (Added) All 9 RW units, to include FOLs will:

- 14.19.13.1. (Added) Comply with FOD directives in AFI 21-101, AFI 21-101 Combat Air Force SUP1 and this instruction.
- 14.19.13.2. (Added) Participate in and follow 9 RW FOD and DOPP guidance to prevent damage to 9 RW assets in addition to any requirements of host base programs
- 14.19.13.3. (Added) Appoint a unit FOD Monitor and an alternate if identified as required attendees in the 9 RW Quarterly FOD Meeting (see Para 3.1.1.) and forward a letter of appointment to the 9 RW FOD Monitor (9 RW/CVF). FOLs and 9 MOS are exempted from this requirement; an assigned QA representative will serve as the unit FOD monitor.
- 14.19.13.4. (Added) Notify 9 RW FOD/DOPP Monitor of any FOD/DO incidents involving 9 RW aircraft as soon as possible but no later than 12 hours after incident.
- 14.19.13.5. (Added) Ensure areas around dumpsters near the flight line or any aircraft maintenance facility are kept FO free and dumpster lids closed. Units will ensure dumpsters are emptied when they become full.
- 14.19.13.6. (Added) Each unit possessing towable sweepers will develop a plan for sweeper usage.
- 14.19.14. (Added) Unit FOD Monitors will:
- 14.19.14.1. (Added) Serve as unit points of contact for the unit on all FOD matters.
- 14.19.14.2. (Added) Maintain an area for FOD information in work centers that contribute to FOD prevention. Placement is at unit discretion and should afford the greatest possible access and visibility to work center personnel.
- 14.19.14.3. (Added) Be familiar with FOD regulations and inspect their unit weekly for overall compliance. Inspection results will be used internally to correct any FOD hazards.
- 14.19.14.4. (Added) Attend the monthly/quarterly FOD meetings or ensure an alternate is present.
- 14.19.14.5. (Added) Ensure every effort is exhausted to determine the specific cause of engine, aircraft and aircraft systems FOD. The unit FOD monitor will be involved in every FOD investigation to ensure all steps are taken by the impoundment official to find the cause of the incident and that sound measures are implemented to mitigate future incidents.
- 14.19.15. (Added) Global Hawk MCE/LRE Ground Communications Personnel will:
- 14.19.15.1. (Added) Inspect the inside of the fenced/secured area of the MCE and LRE control units and associated equipment for housekeeping daily.
- 14.19.15.2. (Added) Cover all removed cannon plugs and wires to prevent FO contamination.

- 14.19.15.3. (Added) Immediately clean loose debris from inside of the MCE/LRE control units.
- 14.19.15.4. (Added) Report any electrical failure associated with FO as a FOD incident IAW AFI 21-101, AFI 21-101 Combat Air Force SUP1, and this instruction.
- 14.19.16. (Added) Maintenance Operations Center or Command Post will notify the 9 RW FOD Monitor of any FOD related incidents impacting 9 RW aircraft.
- 14.19.17. (Added) Maintenance Training Flight will conduct general FOD prevention awareness briefings during maintenance orientation courses.
- 14.19.18. (Added) Maintenance work center supervisors will:
- 14.19.18.1. (Added) Provide specific FOD training to all personnel within 30 days of arrival and at least annually thereafter.
- 14.19.18.2. (Added) Train all assigned personnel on the importance of the FOD Prevention Program to the mission and ensure personnel are familiar with the policies and procedures contained in this instruction.
- 14.19.18.3. (Added) Periodically brief all personnel on dangers associated with aircraft/engine intakes.
- 14.19.18.4. (Added) Ensure areas around work center and routes traveled by personnel and vehicles between work center and aircraft are kept FOD free. Particular attention will be given to areas traveled by flight line vehicles and equipment, to include FOD checkpoints.
- 14.19.18.5. (Added) Control weeds in and around their assigned areas of responsibility.
- 14.19.19. (Added) Pilots will ensure all personal items are accounted for prior to entering/exiting cockpit.
- 14.19.20. (Added) Engine run personnel will accomplish and document a pre-run inspection worksheet, (**Attachment 31**, U-2, **Attachment 32**, T-38 or **Attachment 33**, RQ-4) prior to aircraft start for high power/trim pad runs 88% and above and maintain the documents in the AFTO Forms 781A.
- 14.19.21. (Added) Aircraft run supervisors will ensure applicable TO requirements have been met and the worksheet is completed.
- 14.19.22. (Added) Personnel performing engine intake/exhaust inspections will:
- 14.19.22.1. (Added) Use intake/exhaust bunny suits for intake/exhaust inspections only.
- 14.19.22.2. (Added) Remove all items from pockets, as well as any objects that could fall off

- without notice such as blousing straps, line badge, etc, prior to putting on intake bunny suit.
- 14.19.22.3.. (Added) Inspect all items semi-permanently attached to under clothing such as buttons prior to and after inspection/bunny suit removal.
- 14.19.22.4. (Added) Inspect all boot/shoe laces and tread for any FO prior to entry into intake if cloth over-boot is utilized.
- 14.19.23. (Added) Personnel who operate vehicles on the flight line, to include low-speed vehicle operators will:
- 14.19.23.1. (Added) Ensure vehicles are FO free prior to entering the flight line. This includes interior of vehicles and beds/compartments of trucks/vehicles.
- 14.19.23.1.1. (Added) The FOD inspection includes dirt, rocks or debris on the underside and outside of vehicles.
- 14.19.23.1.2. (Added) The vehicle must be sprayed down with a high-pressure washer prior to entering a FOD check area if dirt, rocks or debris are present on the underside and/or outside of the vehicle. Dirt, rocks or debris must not be left at the FOD check point.
- 14.19.23.2. (Added) Accomplish FOD inspections as part of the vehicle daily inspection if the vehicle enters the flight line area more than once a week and at all FOD check points regardless of how often the vehicle enters the flight line.
- 14.19.23.3. (Added) Perform a FOD check after leaving the finished roadway or at FOD check points.
- 14.19.23.3.1. (Added) Emergency response vehicles are exempt if directly responding to an emergency situation.
- 14.19.23.3.2. (Added) Vehicle engines will be shut off and parking brakes will be set during tire FOD checks, unless a qualified driver remains in the driver's seat.
- 14.19.23.3.3. (Added) Drivers will keep vehicle door shut while rolling forward for safety.
- 14.19.23.4. (Added) If driving through debris is unavoidable, operators will stop immediately after passing through the debris and inspect tires for FO. All rocks/pebbles greater than 1/8 inch in diameter will be removed from tires.
- 14.19.24. (Added) All personnel will:
- 14.19.24.1. (Added) Remove unsecured items from clothing/pockets when within 25 feet of an operating engine
- 14.19.24.2. (Added) Not carry personal tools or electronic devices on the flight line. Exception,

electronic devices may be carried in a personal bag when transporting to storage area.

- 14.19.24.3. (Added) Not carry personal bags or place them on the flight line or in aircraft shelters on or around aircraft, aircraft engines, CTK, or AGE. Exception, personal bags may be carried when transporting them to storage area.
- 14.19.24.3.1. (Added) Storage areas will be limited to offices, U-2 dock boxes, POGO shack, lockers and break areas.
- 14.19.24.3.2. (Added) Bags must be inspected prior to entry of the FOD checkpoint to ensure they are FO free and secure. Once inspected, bags will remain zipped and secured. The shortest path to the storage area will be taken.
- 14.19.24.3.3. (Added) Personal bags may be open in approved storage area.
- 14.19.24.3.4. (Added) Personal bags must be inspected prior to exiting an approved storage area. Once inspected, bags will remain zipped and secured.
- 14.19.24.3.5. (Added) Personal bags will not have attachments or items that can fall off the bag without notice.
- 14.19.24.3.6. (Added) Personal bags will be marked with the individuals name and unit.
- 14.19.24.4. (Added) A bag issued for the purpose of carrying chemical warfare protective gear is not considered a personal bag.
- 14.19.24.5. (Added) A check of all uniform accoutrements will be performed prior to entering and immediately after exiting a controlled maintenance area.
- 14.19.24.6. (Added) Strictly adhere to "RED X" requirements in AFI 21-101 for work performed in and around the engine intake area. This requirement also includes uninstalled engines.
- 14.19.24.7. (Added) Place consumables such as screws, bolts, washers, cotter pins, etc. in screw bags or zip lock type bags when taken to work areas. Loose hardware will not be carried in tool bags or individuals pockets.
- 14.19.24.7.1. (Added) Attach screw bags to removed parts/components to account for removed hardware.
- 14.19.24.7.2 (Added) Document labels with Equipment I.D., nomenclature, quantity, employee number, and date. Example: Aircraft 80-1091, Panel R-2 screws, 18 each, 01234, 6 Jun 08.
- 14.19.24.8. (Added) Thoroughly police work areas for FOD as soon as each job is completed and immediately search when an item is dropped or misplaced.
- 14.19.24.9. (Added) Notify the MOC or Base Operations when unscheduled sweeper

requirements arise.

- 14.19.24.10. (Added) Keep all areas within 50 feet of an aircraft parking or engine operation, all areas where an aircraft will be towed or taxied, all aircraft maintenance hangars/shelters and all entry points to the flight line free of foreign objects.
- 14.19.24.11. (Added) Keep all support equipment in hangars and shelters free of foreign objects.
- 14.19.24.12. (Added) Keep all powered and non powered AGE on the flight line or in aircraft maintenance facilities FOD free, and no hardware may be missing.
- 14.19.24.13. (Added) Do not bring glass drink containers on the flight line or in vehicles on the flight line. All empty containers will be placed in FOD cans.
- 14.22.3.2. The Hangar Queen Manager will Review the aircraft AFTO Form 781 series daily and ensure no disparity with IMDS.
- 14.22.3.4. (Added) QA will track hangar queen aircraft and will perform a rated aircraft forms and IMDS inspection every 14 calendar days.
- 14.24.1. Unit PWCS managers will read the "Using Organization" responsibilities in AFI 33-106 and complete other training as required by the base/wing PWCS manager. Initial training for LMR users requires hands-on training of specific LMR functions with emphasis on use of radios in secure mode and a briefing from the section/shop/flight chief on radio discipline.
- 14.24.4. (Added) All LMRs and associated equipment must be inventoried at least once a year, whenever there is inward or outward movement of assets within the account code and when there is a change of unit PWCS managers.
- 14.24.5. (Added) Units will route call sign changes to the 9 MXG MOC for approval and inclusion in this instruction.
- 14.24.6. (Added) LMR Procedures.
- 14.24.6.1. (Added) All normal radio nets will be used during the deployment preparation and deployment portions of Phase I Operational Readiness Exercises (ORE) or ORI.
- 14.24.6.2. (Added) Net B will be used at the simulated deployed location during the regeneration portion of a Phase I ORE/ORI and during the entire Phase II ORE/ORI.
- 14.24.6.3. (Added) Normal call signs will be preceded by "Deployed" for the regeneration portion of Phase I OREs/ORIs and the entirety of Phase II OREs/ORIs.
- 14.30.2.3. (Added) Production superintendents will monitor all maintenance during the launch sequence and enforce compliance with this instruction.

- 14.30.2.3.1. (Added) The production superintendent or expediter will give the following information to the MOC and the debrief section (via secure means at FOLs) as soon as the Red Ball discrepancy occurs:
- 14.30.2.3.2. (Added) Aircraft Tail Number.
- 14.30.2.3.3. (Added) Red Ball Discrepancy.
- 14.30.2.3.4. (Added) Work Unit Code of system.
- 14.30.2.3.5. (Added) Work center/shop the discrepancy is coded out to for IMDS purposes.
- 14.30.2.3.6. (Added) Estimated time of completion for discrepancy.
- 14.30.2.4. (Added) The respective debrief section will input all Red Ball discrepancies in IMDS and assign a job number upon notification of a Red Ball by a production superintendent or expediter.
- 14.30.2.4.1. (Added) Due to the critical nature of the U-2 and T-38 ejection systems, any ejection system discrepancy resulting in a Red Ball must be inspected by a Red X certified egress technician prior to aircraft taxi.
- 14.30.2.4.2. (Added) Maintenance actions to reset the system and/or reload COMSEC keys that lead to an aircraft launch will not be annotated or tracked in IMDS.
- 14.30.2.4.3. (Added) After the Red Ball is complete, the production superintendent or expediter will inform the MOC time of completion and corrective action for the Red Ball.
- 14.30.2.4.4. (Added) The production superintendent or expediter will ensure that IMDS is properly documented and cleared as soon as possible. Note: When IMDS is down, follow established procedures to ensure the appropriate documentation is accomplished as soon as possible.
- 14.30.2.4.5. (Added) Aircraft/ground elements will be made safe for maintenance IAW T.O. 11A-1-33 and mission design series specific TOs.
- 14.30.2.4.6. (Added) Perform operational checks on all grounding systems any time a connector plug is disconnected. In-flight operational checks are allowed for non-grounding systems.
- 14.30.2.4.7. (Added) If a component removal/installation is required and it necessitates an operational check, the pilot may perform this function as long as all checks are completed in accordance with applicable TO and signed off by a qualified technician.
- 14.30.2.4.8. (Added) Maintenance workers will ensure safety zones are clear and strictly adhered to during the maintenance process (i.e., intake/exhaust, radio frequency emitters, speed brakes, flight controls, etc).

- 14.32.1.1. All squadrons in the 9 MXG will conduct a semi-annual self-inspection during January and July. Self-inspections conducted out-of-cycle will satisfy the semi-annual requirement provided the next scheduled inspection does not exceed 9 months.
- 14.32.1.1.1 (Added) QA Superintendent will ensure the MXG/CC designates a company-grade officer or senior NCO as POC to oversee the semi-annual and MXG/CC change of command self-inspection. This is a rotational responsibility.
- 14.32.1.1.2. (Added) SQ/CC will designate a squadron self-inspection monitor to oversee the semi-annual and 45 day change of command self-inspection.
- 14.32.2.1. All ACCDIR Critical Compliance Objectives (CCO) will be considered Critical items.
- 14.32.2.2. All ACCDIR Core Compliance Item (CCI) and General Compliance Items (GCI) will be considered Non-critical items.
- 14.32.2.4. (Added) ACC Compliance and Standardization Requirement Lists (C&SRL) loaded in the 9 RW Unit Compliance Tracking Database (UCTD) form the basis for the 9 MXG Self-Inspection Program. QA will contact 9 RW Plans and Programs for full access and squadron/flight monitors will contact 9 MXG QA for access to the database.
- 14.32.2.5. (Added) Squadron operations officers/superintendents will identify applicable C&SRLs to their squadron and assign responsibilities for each.
- 14.32.2.6. (Added) Squadron self-inspection monitor will verify the most current C&SRLs are loaded in the UCTD.
- 14.32.2.7. (Added) The MXG self-inspection POC will monitor each squadron's progress and compile an overall report for the MXG/CC. The report will include all CCO items not in compliance and will be provided to the QA superintendent.
- 14.32.2.8. (Added) The QA superintendent will provide quarterly noncompliant CCO updates to the MXG/CC until resolved, waivered, or LIMFACs are reported formally.
- 14.32.2.9. (Added) The squadron self-inspection monitor will monitor each flight's progress and compile a report for the SQ/CC. The report will include all CCO, CCI, and GCI items not in compliance and will be provided to the QA superintendent.
- 14.32.2.9.1. (Added) The squadron self-inspection monitor will provide monthly updates to the SQ/CC for all noncompliant discrepancies.
- 14.32.2.9.2. (Added) The squadron self-inspection monitor will report updates quarterly to the SQ/CC and QA superintendent until resolved, waivered, or LIMFACs are reported formally.
- 14.32.2.10. (Added) The flight chief/OIC will monitor each assigned C&SRL and will annotate

- compliance in the UCTB database. All noncompliant discrepancies will list the applicable deficiency/causal codes listed in AFI90-201, Table 2.1, *Deficiency/Causal Codes and Explanations*.
- 14.32.2.10.1. (Added) The flight chief/OIC will review/update all noncompliant discrepancies in the UCTD on a monthly basis.
- 14.32.2.11. (Added) The squadron and QA superintendent self-inspection continuity book will be organized from TAB A E (may be digital).
- 14.32.2.11.1. (Added) TAB A, signature log reflecting self-inspection completion date.
- 14.32.2.11.2. (Added) TAB B, reports for the most recent local operational readiness inspection, unit compliance inspection and logistics standardization and evaluation team visit.
- 14.32.2.11.3. (Added) TAB C, Noncompliant CCO, CCI, GCI findings, and formal approval for waivered items.
- 14.32.2.11.4. (Added) TAB D, additional information pertinent to the self-inspection program.
- 14.32.2.11.5. (Added) TAB E, Special Interest Items.
- 14.32.2.12. (Added) All additional MXG program continuity books, (may be digital) will be standardized and organized from TAB A-F. The only exception to this format will be for programs that must use a standardized format of their own (i.e. safety, hazardous waste, equipment accounts, etc...).
- 14.32.2.12.1 (Added) TAB A, Letters of appointment and training certificates.
- 14.32.2.12.2. (Added) TAB B, Duties and responsibilities. This should be a written plan in plain language so anybody could pick up your program and manage it.
- 14.32.2.12.3. (Added) TAB C, Noncompliant CCO, CCI, GCI findings, and formal approval for waivered items.
- 14.32.2.12.4. (Added) TAB D, Any DD Form 2861 cross reference forms and/or reference only copies of governing regulations or instructions.
- 14.32.2.12.5. (Added) TAB E, The program itself. Examples would be AF Form 55's, safety briefings, fire extinguisher inspection dates, storage plans etc.
- 14.32.2.12.6. (Added) TAB F, Any miscellaneous correspondences or documentation. Examples would be e-mail traffic or historical data.
- 14.32.2.13. (Added) Tabs may be further broken down using alpha numeric tabs such as TAB A-01.

- 14.32.2.14. (Added) All program continuity books must be listed on the organizations file plan and have the appropriate disposition sticker on the inside cover.
- 14.37.1.1. Or FOL CC.
- 14.37.1.5. (Added) The 9 MXG Mode IV/RWR Program Manager will ensure each AMU appoints, in writing, a primary and alternate Mode IV/RWR Program Monitor. The FOL Mode IV/RWR Program Manager will ensure all program requirements are met, but is not required to appoint program monitors. AMU Mode IV/RWR Program Monitors will:
- 14.37.1.5.1. (Added) Ensure all Mode IV/EW checks and results are entered in both the aircraft forms and the IMDS. There is no requirement to maintain a tracking list of results since testing data and results for every aircraft are entered into IMDS.
- 14.37.1.6. (Added) Qualified personnel will perform Mode IV ground checks as follows (not applicable to T-38 aircraft).
- 14.37.1.6.1. (Added) Ensure the AN/APM-424, AN/APM-4530, or equivalent test set is operational and loaded with the Mode IV code for the next flying day.
- 14.37.1.6.2. (Added) Ensure an "Info Note" write-up is documented in the AFTO Form 781A indicating the date when the Mode IV was keyed.
- 14.37.1.6.3. (Added) Ensure Mode IV checks are performed on the upper and lower antennas.
- 14.37.1.6.4. (Added) Ensure proper coding devices are available and set with correct daily code IAW applicable instructions.
- 14.37.1.6.5. (Added) Ensure personnel are qualified to use the AN/APM-424, AN/APM-480, or equivalent test set.
- 14.37.1.6.6. (Added) After performing Mode IV test, notify the production superintendent if any discrepancies exist.
- 14.37.1.7. (Added) Qualified personnel will perform RWR/EW pre-flight on U-2S aircraft with installed AN/ALQ-221 systems prior to flight, unless waived by the 9 MXG/CC or FOL/deployed equivalent.
- 14.37.1.8. (Added) There is no capability for U-2 roll through checks. This requirement will be accomplished with a RWR/EW pre-flight IAW appropriate U-2 T.O.s.
- 14.37.1.9. (Added) Enter all checks in aircraft forms and IMDS.
- 14.37.1.10. (Added) IMDS will be used to verify completion of checks required by this instruction.

- 14.38.5.8. (Added) will ensure oil cart sampling is completed IAW Para 14.38.12.
- 14.38.7.1. Maintain OAP status on all assigned oil servicing carts.
- 14.38.12. (Added) Expeditor/Maintenance Flight as applicable will:
- 14.38.12.1. (Added) Ensure all in use oil servicing carts are sampled weekly and delivered to the JOAP lab no later than 1000 hours the first duty day of each week. Any oil carts not received by 1500 hours will be placed on code "P" and are not authorized to service aircraft engines until the code has been lifted with an acceptable OAP sample and coded "A".
- 14.38.12.2. (Added) Ensure DD Form 2026 is submitted with every oil cart sample delivered to the OAP lab.
- 14.38.12.3. (Added) Ensure oil carts are re-sampled when the OAP lab suspects contamination. The new sample will be delivered to the OAP lab as a "Red Cap" and will not service any aircraft until results are coded "A".
- 14.38.12.4. (Added) Ensure DD Form 2026 is submitted with every oil cart sample delivered to the OAP lab as a "Red Cap".
- 14.38.12.5. (Added) Ensure oil carts are re-sampled when the OAP lab suspects contamination. The new sample will be delivered to the OAP lab as quickly as possible.
- 14.39.4.1.2. (Added) Personnel assigned/attached to 9 MXG or FOL required to operate hangar doors must be trained on operations. Units will develop training plans for hangar door operations tailored to the type of door they utilize. Include hangar door hazards in job safety training plans in accordance with AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health Program.* Initial training requires hands-on training. Refresher training can be accomplished with a video or slideshow presentation.
- 14.42.2.1.1. (Added) Beale AFB Cold Weather Hangar Door Procedures.
- 14.42.2.1.2. (Added) Fire suppression systems in aircraft hangars at Beale AFB are not subject to freezing during normal winter weather conditions since storage containers for suppression systems are located in closed areas. MOC will monitor outside temperatures and ensure the notification procedures in AFI 21-101, CAFSUP1 are followed in the event temperatures fall below those specified in the CAFSUP1.
- 14.42.2.1.3.. (Added) Tow team supervisors are responsible for ensuring doors are closed immediately after hangaring or removing an aircraft from a hangar during the months of Dec-Feb or anytime hangar heat is on. If doors must be opened to allow movement of equipment, the individual moving the equipment must ensure the doors are closed after movement of the equipment.
- 14.44. Forward Operating Location Staff Assistance Visit Program.

- 14.44.1. (Added) The 9 MXG is responsible for oversight of FOL maintenance functions.
- 14.44.2. (Added) The FOLs rely on 9 MXG for maintenance expertise and AFI/OI interpretation in the form of SAVs.
- 14.44.3. (Added) The standard SAV length is 5-duty days.
- 14.44.4. (Added) The ideal SAV frequency is once a year, (two times per year 5 RS). Events at either Beale AFB, or FOLs may preempt a SAV at any time.
- 14.44.5. (Added) The SAV areas listed in **Attachment 34**, 5 RS are intended to rotate each SAV. The SAV areas listed **Attachment 35**, Det 3, **Attachment 36** Det 4, and <u>Attachment 37</u>, 1 ERS are intended to be inspected each SAV. HQ ACC and/or special interest items deemed necessary by the 9 MXG/CC, 9 OG/CC or FOL/CC may also be reviewed during the SAV.
- 14.44.6. (Added) The C&SRL will be matched functionally to the organizational structure of the FOL maintenance functions.
- 14.44.7. (Added) In the event a 5 RS SAV is skipped due to other events taking precedence, the 9 MXG/CC, 9 OG/CC and FOL/CC may determine it is beneficial to lengthen the next scheduled SAV and conduct evaluation of all functional areas.
- 14.44.8. (Added) Should the C&SRLs in Attachment 34, 35, 36, and 37 change, AFI 21-101 and all applicable supplements will be used to verify compliance in the areas indicated by the C&SRL title.
- 14.44.9. (Added) The SAV team may review those areas previously identified as "Improvement Opportunities" to verify corrective measures are being pursued
- 14.44.10. (Added) The 9 MXG/SUPT will designate a rotational SAV team leader from SNCOs in the group.
- 14.44.10.1. (Added) The SAV team leader will:
- 14.44.10.1.1. (Added) Review the SAV areas in Attachment 34, 35, 36, and 37 as applicable and ensure qualified personnel are identified to conduct the SAV.
- 14.44.10.1.2. (Added) Coordinate the SAV dates with FOL MOO/SUPT or equivalent.
- 14.44.10.1.3. (Added) Designate a SNCO on the team to oversee all travel and billeting requirements.
- 14.44.10.1.4. (Added) Arrange for the team to arrive at FOL at least 24 hours prior to the SAV in-brief.

- 14.44.10.1.5. (Added) Make every attempt to obtain on base billeting.
- 14.44.10.1.6. (Added) Review past SAV reports and out-briefs saved in the FOL SAV folder on the 9 MXG shared drive, paying particular attention to areas previously identified as "Improvement Opportunities."
- 14.44.10.1.7. (Added) Ensure the SAV agenda is coordinated with FOL supervision at least 6 weeks prior to the SAV.
- 14.44.10.1.8. (Added) Ensure sufficient numbers of laptop computers are available for the team with all required software/support materials installed/saved (C&SRLs, etc.)
- 14.44.10.1.9. (Added) Provide FOL supervision with travel details when they are finalized.
- 14.44.10.1.10. (Added) Conduct SAV in-brief with FOL CC and supervision.
- 14.44.10.1.11. (Added) Hold daily meetings during the SAV with SAV members to determine progress.
- 14.44.10.1.12. (Added) Provide MOO/SUPT or equivalent with daily summary, either via e-mail or personal briefing.
- 14.44.10.1.13. (Added) Compile a SAV out-brief for the FOL CC and supervision.
- 14.44.10.1.14. (Added) Identify "Superior Performers"
- 14.44.10.1.15. (Added) Identify "Strengths"
- 14.44.10.1.16. (Added) Identify "Improvement Opportunities"
- 14.44.10.1.17. (Added) No final grade will be assigned by the SAV Team Leader.
- 14.44.10.1.18. (Added) Compile a SAV report for the 9 MXG/CC, 9 OG/CC and FOL CC in a trip report format from AFH 33-337, *The Tongue and Quill*. Ensure the final SAV report is saved in the FOL SAV Continuity folder on the 9 MXG shared drive.
- 14.44.10.1.19. (Added) Save the SAV out-brief in the FOL SAV Continuity folder on the 9 MXG shared drive.
- 14.44.11. (Added) The FOL MOO/SUPT or equivalent will appoint a unit POC to host the SAV team and review past SAV reports.
- 14.44.11.1. (Added) The SAV host will:
- 14.44.11.1.1 (Added) Review the SAV agenda at least 1 month prior to the SAV and ensure all affected agencies/offices are aware of SAV areas.

- 14.44.11.1.2. (Added) Prepare a work area for the SAV team.
- 14.44.11.1.3. (Added) Ensure sufficient electrical supply to simultaneously operate at least six laptop computers.
- 14.44.11.1.4. (Added) Provide access to two printers capable of producing letter quality products.
- 14.44.11.1.5. (Added) Coordinate travel arrangements with SAV team chief, (5 RS particularly travel from Incheon/Seoul to Osan in the event of commercial travel.)
- 14.44.11.1.6. (Added) Organize SAV team in-brief with FOL CC and MOO/SUPT or equivalent on the first morning of the SAV.
- 14.44.11.1.7. (Added) Communicate daily with SAV team chief throughout the SAV to verify support needs are being met.
- 14.44.11.1.8. (Added) Schedule/organize SAV team out-brief with FOL CC and supervision.
- 14.45. (Added) Hangaring Procedures.
- 14.45.1. (Added) Open shelter/hanger doors a minimum of 10 feet.
- 14.45.2. (Added) Personnel in charge of moving any equipment/item in or out of hangar doors will ensure a minimum of 10-feet clearance on both sides of the equipment/item.
- 14.45.3. (Added) Doors will be fully opened when aircraft are towed through hanger door opening.
- 14.45.4. (Added) The tow team supervisor will initiate and ensure sections I and II are completed on the Aircraft Hangaring Checklist (**Attachment 29**). For U-2S/ST and RQ-4, place the checklist in the aircraft forms binder. Laminated checklists may be used.
- 14.45.4.1. (Added) QA is the OPR for the Aircraft Hangaring Checklist. Aircraft prepared for hangar entry will meet the requirements listed in this operating instruction. Coordinate any changes to the aircraft hangar entry checklist with 9 MXG/QA.
- 14.45.5. (Added) When the aircraft is removed from the hangar, the tow team supervisor will file the completed Aircraft Hangaring Checklist with the shelter checklist until next aircraft is hangared.
- 14.45.6. (Added) Each hangared aircraft should have a tow bar or emergency tow/steering bar installed on aircraft or next to aircraft (based on available of assigned and serviceable tow-bars).
- 14.45.7.. (Added) The MOC will make an announcement on all maintenance nets that there is an emergency hangar evacuation in progress. The production superintendent responsible for the

aircraft will immediately direct a tow team to the scene to remove the aircraft.

- 14.45.8. (Added) In event an aircraft cannot be towed by normal means, any tow vehicle or bobtail capable of moving the aircraft will be connected with tow bar or emergency snatch bar. The vehicle operator will exercise extreme caution and proceed only as far as necessary to safely park the aircraft.
- 16.1.1. Any deviation to local written instructions will be approved by the 9th MXG/CC or equivalent and coordinated through the 9th Maintenance Squadron Supervision and the Egress Section Chief or Shift Production Supervisor.
- 16.1.12. (Added) All egress assemblies and components will be inspected for serviceability and safety devices, and will be properly tagged before they are stored.
- 16.1.13. (Added) When an ejection seat is removed for a foreign object or suspected foreign object in the cockpit/crew compartment, the seat may be reinstalled after the impoundment release authority provides verbal authorization. No verbal approval is required when foreign objects are located and removed. However, the write-up must be cleared in the aircraft 781A Forms prior to reinstalling the seat.
- 16.1.14. (Added) When egress maintenance is being performed on the aircraft, no other maintenance task or inspections will be accomplished in or underneath the cockpit area until the egress task is complete. Maintenance may be performed aft of the cockpit area. No external power will be applied to the aircraft unless the Egress supervisor deems it necessary. The egress supervisor is responsible for stopping the operations when any personnel enter the immediate area or performs maintenance that interferes with safety.
- 16.2.5. To include access to keys and/or combinations to the egress section explosive maintenance and explosive storage areas.
- 16.2.6.1. (Added) Concurrent explosives operations will not be performed at the Egress Facility (Building 1240).
- 16.2.6.2, (Added) A security inspection will be performed at the beginning and end of each shift and discrepancies will be corrected as soon as possible.
- 16.3.1.1. (Added) Explosives will be handled only by trained personnel.
- 16.3.1.2. (Added) Report all hazards to supervisors. Submit USAF Hazard Report (AF IMT 457) if necessary.
- 16.3.1.3. (Added) It is each individual's/supervisors responsibility to use personnel protective clothing and safety equipment when required.
- 16.3.1.4. (Added) Personnel will remove all jewelry, watches, rings, etc., prior to handling explosives.
- 16.3.1.5. (Added) Pre-task Safety Briefing, (**Attachment 30**) will be accomplished before any handling of explosives or explosives operations. Visitors/Casuals Safety Briefing will be accomplished when entering the maintenance bay if explosives are present or stored.

- 16.3.1.6. (Added) Warning signs and cones will be posted in front of aneroid chamber venting line prior to performing Aneroid-Actuated Initiator checkouts. Warning cones will be posted on existing Red Line 42 feet from entrance to prevent injury to personnel outside the facility in the event of inadvertent firing of Aneroid-Actuated Initiator.
- 16.3.1.7. (Added) Egress maintenance will not be started on unsheltered aircraft if the potential exists for adverse weather such as lightning, wet weather, high winds, etc.
- 16.3.1.8. (Added) If dangerous munitions, abnormal conditions or a hazardous situation is encountered, all operations in the immediate vicinity will be stopped.
- 16.3.1.8.1. (Added) Evacuate personnel to a minimum withdrawal distance of 600 feet establish a cordon with entry points and designate an On-Scene Commander (OSC).
- 16.3.1.8.2. (Added) Notify Egress Section, 9 MXS Additional Duty Weapons Safety Representatives, Explosives Ordnance Disposal, MOC, and Fire Department to render assistance in eliminating the hazard (if applicable), and 9 RW Weapons Safety Chief to investigate the occurrence.
- 16.3.1.8.3. (Added) Operations shall not resume until the hazard has been eliminated.
- 16.3.4. (Added) Personnel Limits, Explosive Limits, and Fire Symbols.
- 16.3.4.1. (Added) A minimum of two, but not more than a maximum of twelve personnel will be allowed to complete a task at one time; the operation supervisor will ensure only essential personnel needed to do the task are in the area.
- 16.3.4.2. (Added) Personnel limits during explosives operating are 4 supervisors, 4 workers, and 4 casuals. Stop operations when visitors are present.
- 16.3.4.3. (Added) Egress Section's explosives limits, hazard class/divisions, and compatibility groups will be listed on AF IMT 2047, Explosive Facility License and updated as required.
- 16.3.4.4. (Added) The fire symbols used primarily by the Egress Section are fire symbol 3 and fire symbol 4. The withdrawal distance for fire symbol 3 is 600 feet and fire symbol 4 is 300 feet.
- 16.4.1.1. (Added) All egress personnel, QA personnel (Egress Inspector), and augmentees overdue explosive safety training will not perform any explosives or weapons related duty until training requirements are met.
- 16.4.1.2. (Added) Egress augmentees will only work on the egress system with a qualified and certified egress personnel present. Once certified, egress augmentees may sign off completed maintenance actions. However, qualified and certified egress personnel must inspect and sign off any work completed by an augmentee that returns the system to full operation capability and

clears an aircraft for flight. QA inspectors can inspect on tasks as he or she becomes certified on the task. The practical evaluation will be accomplished on the following tasks prior to performing egress system maintenance or inspections.

- 16.4.1.2.1. (Added) Seat Removal.
- 16.4.1.2.2. (Added) Seat Installation.
- 16.4.1.2.3. (Added) Seat Special Inspection.
- 16.4.1.2.4. (Added) Egress Final Inspection.
- 16.4.1.2.5. (Added) Aneroid Initiator Checkout.
- 16.4.1.2.6. (Added) Aneroid Removal.
- 16.4.1.2.7. (Added) Aneroid Installation.
- 16.4.1.2.8. (Added) Drogue Chute Removal.
- 16.4.1.2.9. (Added) Drogue Chute Installation.
- 16.4.1.2.10. (Added) Catapult Removal.
- 16.4.1.2.11. (Added) Catapult Installation.
- 16.4.1.3. (Added) Egress augmentees must meet the above training requirements on all tasks except task 16.4.1.2.4 Egress Final Inspection. The Egress Final Inspection is not a requirement for Egress augmentees.
- 16.15.1. (Added) A qualified crew will make safe the T-38 aircraft egress system for scheduled fire department training in accordance with 00-80G series TOs.
- 16.15.2. (Added) A qualified crew will make safe the U-2 aircraft egress system for scheduled fire department training in accordance with LCL-9MXG-007 local checklist.
- 16.17. (Added) Emergency Issue of Egress Explosives (1377 Stock Class).
- 16.17.1. (Added) Only authorized personnel, Egress Section Chief or Shift Supervisor will notify the 9 MXS production superintendent (Hawk Super) and the affected flight line production superintendent of an emergency issue IAW AFI 21-201 of an egress explosive item.
- 16.17.2. (Added) The egress section will initiate emergency issue only for assets discovered damaged or not meeting manufacture specifications during routine maintenance (in-shop/flight line).

- 16.17.3. (Added) Appropriate PS&D will initiate emergency issue paperwork due to changes in aircraft scheduling (i.e. move of aircraft phase or down for other maintenance).
- 16.18. (Added) Emergency Procedures.
- 16.18.1. (Added) If an egress-related explosive incident or fire occurs, the senior egress person will take charge and ensure the 9 MXS Explosive Mishap Notification Procedures are followed.
- 16.18.2. (Added) In the event of an explosive accident or incident notify immediate supervisor and follow the 9 MXS Explosive Mishap Notification Procedures.
- 16.18.3. (Added) In the event of a fire notify immediate supervisor and follow the 9 MXS Explosive Mishap Notification Procedures.
- 16.18.4. (Added) In the event of a personnel injury notify immediate supervisor and follow the 9 MXS Explosive Mishap Notification Procedures.
- 16.18.5. (Added) In the event of an aircraft crash or mishap, the Egress Section Chief will dispatch a fully qualified designated Egress representative to the crash site and report to the OSC as required.
- 16.19. (Added) Explosives transportation.
- 16.19.1. (Added) Transportation of explosives to and from the 9th Munitions Squadron storage area and/or the job site will be limited to the most direct route. At least two personnel must be present during the entire operation.
- 16.19.2. (Added) Abide by all federal and state driving laws when transporting explosives off-base.
- 16.19.3. (Added) Minimum essential personnel and limited quantities of hazard class/divisions 1.3 and 1.4 explosives may be transported together in the cargo compartment of designated vehicles to include metro and multi-stop types, as long as the explosives are clearly marked. Limit quantities to what is required to accomplish normal mission requirements.
- 16.20. (Added) TCI Management.
- 16.20.1. The AMU PS&D section will prepare accomplish and forward all required forms and Issue Requests to 9 Munitions Squadron for all scheduled egress time change items.
- 16.20.2. The egress section will:
- 16.20.2.1. Maintain a file on each aircraft tail number containing a current hard copy of the time change item listing from IMDS. If errors are noted in reviews, the egress section will update IMDS, documentation and notify the appropriate PS&D element.

- 16.20.2.2. Pick-up munitions assets the week prior to the scheduled maintenance date if possible.
- 16.20.2.3. Inspect all explosive items received from 9 Munitions Squadron for damage, security, and any defects as prescribed by applicable publications, prior to acceptance.
- 16.20.4. (Added) Perform a 100% CAD/PAD inventory and verification of egress items to ensure IMDS items match the actual configuration on all newly assigned aircraft (and as applicable to depot returns) during the acceptance inspection, during major PE inspections, and when deem necessary. Verify seat serial number match the information in IMDS.
- 16.20.4.1. (Added) At a minimum, verify the accuracy of the part number, serial number, work unit code, quantity, due date, DOM, DOI and lot number.
- 16.20.4.2. (Added) Load all egress items in IMDS as replacement occurs and ensure DOM and DOI is loaded correctly.

PAUL H. MCGILLICUDDY, Brigadier General, USAF Commander, 9th Reconnaissance Wing

Attachment 1 GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-301 v1, Aircrew Flight Equipment (AFE) Program, 25 Feb 2009

AFI 11-401, Aviation Management, 7 Mar 2007

AFI 21-101, Aircraft and Equipment Maintenance Management, 26 July 2010

AFI 21-103, Equipment Inventory, Status, and Utilization Reporting, 14 Dec 2005

AFI 21-201, Conventional Munitions Maintenance Management, 11 Dec 2009

AFI 33-106, Managing High Frequency Radios, Personal Wireless Communication Systems, and the Military Affiliate Radio System, 9 Jan 2002

AFI 33-360, Publication and Forms Management, 18 May 2006

AFI 90-201, Inspector General Activities, 17 Jun 2009

AFI 91-204, Safety Investigations and Reports, 24 Sep 2008

AFI 91-301, Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program, 1 Jun 1996

TO 00-20-1, Aerospace Equipment Maintenance General Policy and Procedures, 1 Sep 06

TO 00-20-2, Maintenance Data Documentation, 15 Nov 09

Adopted Forms

AF Form 55, Employee Safety and Health Record

AF Form 847, Recommendation for Change of Publication

AF Form 2001, Notification of TCTO Kit Requirements

AF Form 2005, Issue/Turn-in Request

AF Form 2411, Inspection Document

AF Form 2691, Aircraft/Missile Equipment Property Record

AF Form 2692, Aircraft/Missile Equipment Transfer/Shipping Listing

AF Form 3952, Chemical Hazardous Material Request Authorization Form

AFTO Form 95, Significant Historical Data

AFTO Form 134, Aviator Breathing Oxygen Servicing Trailer Log (Liquid/Gaseous)

AFTO Form 244, Industrial/Support Equipment Record

AFTO Form 349, B-52 and EC/KC/RC-135 Power Package Test Log

AFTO Form 350, Repairable Item Tag

AFTO Form 781, ARMS Aircrew/Mission Flight Data Document

AFTO Form 781A, Maintenance Discrepancy and Work Document

AFTO Form 781C, Avionics Configuration and Load Status Document

AFTO Form 781J, Aerospace Vehicle - Engine Flight Document

AFOT Form 781K, Aerospace Vehicle Inspection, Engine Data, Calendar Inspection and Delayed Discrepancy Document

CAF Form 140 CTK inventory and control log

CAF Form 145 Lost Tool/Object Report

CAF Form 147, Quality Assurance Impoundment Record

DD Form 1574, Serviceable Tag - Materiel

DD Form 2026, Oil Analysis Request

DD Form 2027, Oil Analysis Record

DD Form 2861, Cross Reference

Abbreviations and Acronyms

AFETS—Air Force Engineering and Technical Service

AGE—Aerospace Ground Equipment

AHE—Automated History Events

AIDR—Acceptance Inspection Deficiency Report

AIM—Automated Inventory Management

ALSMS—Aircrew Life Support Management System

AVUM—Aviation Unit Maintenance

AUR — Accomplishment Utilization Report

C&SRL—Command Compliance and Standardization Requirement Lists

CVF—Wing FOD/DOP Monitor

DO—Dropped Object

DOPP—Dropped Object Prevention Program

DR—Deficiency Report

EDD— Estimated Delivery Date

EMDL—Engine Manager Data Listing

ERV—Emergency Response Vehicles

EW—Electronic Warfare

FLSE—Flight line supply element

MHE—Munitions Handling Equipment

MSAT—Maintenance Scheduling Application Tool

MSDS —Material Safety Data Sheet

NAOC— Aircraft on Alert Status

ORE— Operational Readiness Exercise

OSC—On-Scene Commander

PRA—Planning Requirements Reports

PSPTS—Aerospace Physiological Training Flight

PWCS—Personal Wireless Communication System

RDS—Records Disposition Schedule

SARM—Squadron Aviation Resource Management

SBSS—Standard Base Supply System

SHD—Significant History Data

TSOA—Time Sharing Option Application

UCTD — Unit Compliance Tracking Database

VFR—Visual Flight Rules

VMC—Visual Meteorological Conditions

Attachment 16 (Added)

U-2 AIRCRAFT DEBRIEFING "RED X" CRITERIA LISTING

A16.1. Aircraft Debriefing Red X Criteria Listing.

1

1000 - AIRFRAME

- 1. ITEMS LOST OR MISSING
- 2. BIRDSTRIKE OR LIGHTNING STRIKE
- 3. HARD LANDING
- 4. OVER "G"/OVERSPEED
- 5. ICING

12000 – CANOPY OR COCKPIT

- 1. MALFUNCTION IN CANOPY LOCKING SYSTEM
- 2. CANOPY UNSAFE INDICATION
- 3. F.O. IN COCKPIT
- 4. WINDSCREEN CRACKED/DISTORTED

13000 – LANDING GEAR SYSTEM

- 1. RETRACTION OR EXTENSION FAILURE
- 2. UNSAFE INDICATIONS
- 3. BRAKES INOP
- 4. MAIN OR TAIL WHEEL SHIMMY
- 5. TAIL WHEEL STEERING
- 6. HOT BRAKES

14000 - MANUAL FLIGHT CONTROLS

- 1. ANY MANUAL FLIGHT CONTROL
- 2. UNCOMMANDED INPUTS TO FLIGHT CONTROL SYSTEM
- 3. CONTROL WHEEL NOT CENTERED (EXCEEDS 12 DEGREES)

27000 - POWER PLANT

ALL DISCREPANCIES

41000 – ENVIRONMENTAL CONTROL SYSTM (ECS)

- 1. COCKPIT PRESSURE LOSS OR FLUCTUATIONS
- 2. COCKPIT PRESSURIZES ON GROUND
- 3. UNUSUAL TURBINE NOISE/VIBRATION
- 4. SMOKE AND OR ODORS DETECTED IN COCKPIT
- 5. HOT OR COLD INOP IN MANUAL
- 6. WINDSCREEN ANTI FOG INOP
- 7. WINDSCREEN ANTI ICE INOP
- 8. INFLATABLE SEAL SYSTEM MALFUNCTIONS
- 9. NOSE, E-BAY, COCKPIT OR Q-BAY DOES NOT PRESSURIZE
- 10. COCKPIT AIR PRESSURE SURGES

11. INCORRECT PRESSURE DIFFERENTIAL BETWEEN COCKPIT AND Q-BAY/E-BAY

42000 – ELECTRICAL POWER

- 1. UTILITY OR EMERGENCY BATTERY FAILURE
- 2. GENERATOR FAILURE (AC, DC, OR STANDBY)
- 3. BUS FAILURE (ANY AC OR DC SYSTEM)
- 4. TR UNIT FAILURE
- 5. EMERGENCY INVERTER FAILURE
- 6. BCCU MALFUNCTION/FAILURE

<u>44000 – LIGHTING SYST</u>EM

DAYTIME MISSION:

1. EXTERIOR (BOTH UPPER ANTICOLLISION, AND BOTH LANDING LIGHTS INOP)

NIGHTTIME MISSION

- 2. ANY PRIMARY INSTRUMENT OF ENGINE PERFORMANCE INTERIOR LIGHT IS INOP
- 3. EXTERIOR LIGHTS (ONE POSITION, BOTH UPPER ANTICOLLISION, OR BOTH LANDING LIGHTS INOP)

45000 – HYDRAULIC POWER SYSTEM

- 1. SYSTEM SURGING OR FAILURE
- 2. MALFUNCTION IN INDICATING SYSTEM

46000 - FUEL SYSTEM

- 1. FEED PROBLEMS
- 2. FUEL IMBALANCE
- 3. UNCOMMANDED FUEL DUMPING OR VENTING
- 4. BOOST PUMP DISCREPANCY
- 5. TRANSFER PROBLEMS
- 6. SUMP DWELL/LOW FUEL LEVEL
- 7. INDICATION PROBLEMS/MALFUNCTIONS TOTALIZER

47000 – OXYGEN SYSTEM

- 1. ACTUAL OR SUSPECTED CONTAMINATION
- 2. CONTROL PANEL MALFUNCTIONS
- 3. OXYGEN SYSTEM DEPLETED
- 4. INDICATION MALFUNCTION
- 5. ANY PRESSURE OR QUANTITY ANOMALIES
- 6. EXCESSIVE QUANTITY LOSS

49000 – MISCELLANEOUS UTILITIES

- 1. ENGINE OR AMAD OVERHEAT
- 2. FIRE/OVERHEAT/BLEED AIR INDICATION
- 3. WCA PANEL INOP

51000 – INSTRUMENTS (U-2S, FCP ONLY U-2ST)

- 1. AIRSPEED INDICATOR INOP OR DIFFERENCE BETWEEN SAI AND MDI OF:
 - BELOW 118 KTS 4.0 KTS
 - AT OR ABOVE 118 KTS 6.5 KTS
 - AT OR ABOVE 190 KTS 7.0 KTS
- 2. AIRSPEED INDICATOR INOP OR DIFFERENCE BETWEEN PFD AND SFD
- 3. ALTIMETER INDICATOR INOP OR + 75 FT DIFFERENCE (MAIN OR STANDBY)
- 4. HSI INOP OR \pm 4 DEGREES FROM INS HEADING ON BCDU OR \pm 5 DEGS FROM A FIXED REFERENCE (VOR, TACAN)
- 5. ADI INOP
- 6. MDI FAILURE

52000 - AUTOMATIC FLIGHT CONTROLS SYSTEM

- 1. TOTAL FAILURE
- 2. APADS INOP
- 3. INABILITY TO MAINTAIN SELECTED PARAMETERS WITHIN SAFE LIMITS

<u>57000 – INTEGRATED GUIDANCE (INS/GPS)</u>

- 1. INS INOP
- 2. BCDU MALFUNCTION (U-2S, EITHER COCKPIT U-2ST)
- 3. GPS INOP (ACCEPTABLE FOR LOW SORTIES)

62000 VHF COMMUNICATIONS (U-2S, EITHER COCKPIT U-2ST)

- 1. RADIO INOP (UHF MUST BE OPERABLE)
- 2. PRIMARY AND BACKUP INOP (ARC 210)
- 3. UFCD INOP FOR VHF

63000 UHF COMMUNICATIONS (U-2S, EITHER COCKPIT U-2ST)

- 1. RADIO INOP (VHF MUST BE OPERABLE)
- 2. PRIMARY AND BACKUP INOP (ARC 210)
- 3. UFCD INOP FOR VHF

64000 – INTERPHONE

- 1. U-2S INOP
- 2. U-2ST MUST BE ABLE TO TALK BETWEEN COCKPITS

65000 – IFF SYSTEM AN/APX-101

- 1. TWO OR MORE STATIONS REPORT PROBLEMS
- 2. TOTAL INOP
- 3. MODE C INOP
- 4. UFCD INOP FOR IFF

71000 – RADIO NAVIGATION

- 1. TACAN INOP
- 2. ARS INOP

3. ILS INOP OR ERRONEOUS READING

82000 – BLOCK 20 AVIONICS

- 1. AVP FAILURE
- 2. SFD INOP
- 3. REAR COCKPIT MFD INOP
- 4. CENTER MFD INOP
- 5. BOTH LEFT AND RIGHT MFD'S INOP

Attachment 17 (Added)

RQ-4A/B AIRCRAFT "RED X" CRITERIA LISTING

A17.1. RQ-4A/B Aircraft Red X Criteria Listing.

11000 - AIRFRAME

- 1. EXCESSIVE "G" LOAD UNUSUAL VIOLENT MANEUVERS
- 2. DROPPED OBJECT
- 3. LIGHTNING DAMAGE
- 4. AIRCRAFT STRUCTURAL DAMAGE

13000 - LANDING GEAR SYSTEM

- 1. RETRACT ION OR EXTENSION FAILURE NLG SHIMMY
- 2. UNSAFE INDICATION
- 3. BRAKES INOP
- 4. HOT BRAKES
- 5. HARD LANDING
- 6. HIKE/DEHIKE FAULT

14000 - FLIGHT CONTROL SYSTEM

- 1. UNCOMMANDED INPUT TO FLIGHT CONTROL SYSTEM
- 2. FLIGHT SURFACE MALFUNCTION (INCLUDING INDICATION MALFUNCTIONS)

23000 – POWER PLANT

- 1. POWER LOSS, STALLS STAGNATION, SURGES, UNCOMMANDED AUTO ACCELLERATION, ABNORMAL VIBRATION (BEYOND LIMITS)
- 2. FLAME OUTS
- 3. NO STARTS (TWO CONSECUTIVE TIMES)
- 4. OVER TEMPERATURES
- 5. OVER SPEED
- 6. ABNORMAL OIL PRESSURE
- 7. ENGINE IDLE OUT OF TOLERANCE
- 8. FOD
- 9. INCORRECT INDICATION
 - a. RPM INDICATOR
 - b. OIL PRESSURE INDICATION
 - c. FUEL FLOW INDICATION

41000 - ENVIRONMENTAL CONTROL SYSTEM (ECS)

- 1. ECS OVER HEAT
- 2. FWD OR AFT TEMPERATURE SENSORS INOP
- 3. FWD OR AFT COMPARTMENT PRESSURIZATION FAULT

<u>42000 – ELECTRICAL POWER</u>

1. BATTERY 1, 2, OR 3 FAILURE

- 2. AC OR DC POWER FAILURE
- 3. INVERTER FAILURE

44000 – LIGHTING SYSTEM

- 1. STROBES INOP
- 2. FORMATION LIGHTING INOP

45000 – HYDRAULIC POWER SYSTEM

- 1. SYSTEM SURGING OR FAILURE
- 2. INDICATING SYSTEM MALFUNCTION

46000 – FUEL SYSTEM

- 1. FEED PROBLEMS
- 2. FUEL INBALANCE, UNCORRECTABLE
- 3. EXCESSIVE FUEL CONSUMPTION
- 4. UNCOMMANDED FUEL VENTING
- 5. FUEL PUMP MALFUNCTION
- 6. TRANSFER PROBLEMS
- 7. LOW FUEL INDICATION MALFUNCTION

57000 - INTEGRATED GUIDANCE AND FLIGHT CONTROLS

- 1. AIR DATA MALFUNCTION
- 2. INTEGRATED MISSION MANAGEMENT COMPUTER (IMMC) FAILURE
- 3. NAVIGATION FAILURE
- 4. LCP1 OR LCP2 INOP ON CAMA
- 5. LESS THAN TWO C2 LINKS

62000 – VHF COMMUNICATION

1. ATC RADIO INOP

<u>65000 – IFF SYSTEM</u>

- 1. TOTAL INOP
- 2. MODE 3A, CINOP
- 3. MODE 4 INOP (AS MISSION REQUIRES)

<u>68000 – KU SATTELITE COMMUNICATIONS</u>

1. KU INOP WITH ISS INSTALLED

77000 – IMAGE PROCESS, STORAGE AND DISTRUBUTION

1. ORIGIN 9800 INOP (MISSION REQUIRED) (NOT ACFT)

Attachment 18 (Added)

RD-2A MISSION CONTROL ELEMENT "RED X" CRITERIA LISTING

A18.1.RD-2A Mission Control Element Red X Criteria Listing.

<u>10000 – SHELTER</u>

- 1. LIGHTNING STRIKE
- 2. MAJOR STRUCTURAL DAMAGE

41000 – ENVIROMENTAL CONTROL SYSTEMS

- 1. TOTAL LOSS OF POWER
- 2. LACK OF COLD AIR FLOW (PRIMARY AND BACKUP)

420000 - MCE POWER DISTRIBUTION

- 1. TOTAL POWER LOSS (UPS AND GENERATOR)
- 2. POWER FLUCTUATION

57D00 CREW COMMUNITIONS

- 1. C2 WORKSTATION INOP
- 2. UNCOMMANDED INPUT TO FLIGHT CONTROL SYSTEM

59000 - CREW COMMUNICATIONS

1. TOTAL COMMUNICATION FAILURE

68000 - SATELLITE COMMUNICATIONS

- 1. KU SATCOM INOP (MISSION REQUIRED)
- 2. REMOTE REACHBACK INOP (MISSION REQUIRED)

69000 – MISC COMMUNICATIONS EQUIPMENT

- 1. LOSS OF GPS
- 2. LOSS OF MISC COMMS
- 3. VOIP OR STE INOP
- 4. KG-75 INOP

77000 - SURVEILLANCE

- 1. EO/IR TOTALLY INOP (WHEN MISSION REQUIRES)
- 2. SAR TOTALLY INOP (WHEN MISSION REQUIES)

RD-2B LAUNCH AND RECOVERY ELEMENT "RED X" CRITERIA LISTING

A19.1.RD-2D Launch and Recovery Red X Criteria Listing.

10000 - SHELTER

- 1. LIGHTNING STRIKE
- 2. MAJOR STRUCTURAL DAMAGE

41000 – ENVIROMENTAL CONTROL SYSTEMS

- 1. TOTAL LOSS OF POWER
- 2. LACK OF COLD AIR FLOW (PRIMARY AND BACKUP)

420000 - MCE POWER DISTRIBUTION

- 1. TOTAL POWER LOSS (UPS AND GENERATOR)
- 2. POWER FLUCTUATION

57000 – CREW COMMUNITIONS

- 1. C2 WORKSTATION INOP
- 2. UNCOMMANDED INPUT TO FLIGHT CONTROL SYSTEM

59000 – CREW COMMUNICATIONS

1. TOTAL COMMUNICATION FAILURE

<u>63000 – ATC VOICE COMMUNICATIONS</u>

1. ATC VOICE INOP

69000 – MISC COMMUNICATIONS EQUIPMENT

- 1. LOSS OF GPS
- 2. LOSS OF MISC COMMS
- 3. VOIP OR STE INOP
- 4. KG-75 INOP

Attachment 20 (Added)

9 RW MAINTENANCE LMR CALL SIGNS

Table A20.1. 9 RW Maintenance LMR Call Signs.

PRINCIPAL RADIO USER	<u>CALL SIGN</u>			
9 TH MAINTENANCE GROUP SUPERVISION				
Commander	Recce 4			
Deputy Commander	Recce 4A			
MXG Superintendent	MX Chief			
Quality Assurance Chief	QA Chief			
Quality Assurance Base	QA Base			
Quality Assurance Mobile Units	QA 1 through 25			
Quality Assurance Evaluators (T-38 and Transient Alert)	QAE 1 & 2			
Night Shift / Weekend Duty Officer	Nighthawk			
9 TH MAINTENANCE OPERATIONS SQUADRON SUPERVISION				
Commander	Eagle			
Operations Officer	Eagle 1			
Squadron Superintendent	Eagle Chief			
Superintendent, Maintenance Operations Center	Gatekeeper			
NCOIC, Maintenance Operations Center	Gatekeeper 2			
Maintenance Operations Center	MOC			
9 TH AIRCRAFT MAINTENANCE SQUADRON SUPERVISION				
Commander	Warrior 1			
Maintenance Supervisor	Warrior 2			
Maintenance Superintendent	Warrior Chief			

99 TH AIRCRAFT MAINTENANCE UNIT OIC Dragon Lead Superintendent Dragon Chief Production Superintendent Dragon 3 Aircraft B- Section Expediter Dragon 4 Aircraft A- Section Expediter Dragon 5 Specialist Expediter Dragon 6 Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator Merlin U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch U-2 Debrief Exercise Cells Cell 1-X, as required	Mobility	Mobility		
Superintendent Production Superintendent Dragon 3 Aircraft B- Section Expediter Dragon 4 Aircraft A- Section Expediter Dragon 5 Specialist Expediter Dragon 6 Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator Merlin U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch Debrief Exercise Cells Cell 1-X, as required	99 TH AIRCRAFT MAINTENANCE UNIT			
Production Superintendent Dragon 3 Aircraft B- Section Expediter Dragon 4 Aircraft A- Section Expediter Dragon 5 Specialist Expediter Dragon 6 Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator Merlin U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch U-2 Debrief Exercise Cells Cell 1-X, as required	OIC	Dragon Lead		
Aircraft B- Section Expediter Dragon 4 Aircraft A- Section Expediter Dragon 5 Specialist Expediter Dragon 6 Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator Merlin U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch U-2 Debrief Exercise Cells Cell 1-X, as required	Superintendent	Dragon Chief		
Aircraft A- Section Expediter Dragon 5 Specialist Expediter Dragon 6 Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator Merlin U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch Debrief Exercise Cells Cell 1-X, as required	Production Superintendent	Dragon 3		
Specialist Expediter Dragon 6 Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch U-2 Debrief Exercise Cells Cell 1-X, as required	Aircraft B- Section Expediter	Dragon 4		
Servicing Crew Mids 1, 2 & 3 Raytheon Mission Systems Coordinator Merlin U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch U-2 Debrief Debrief Exercise Cells Cell 1-X, as required	Aircraft A- Section Expediter	Dragon 5		
Raytheon Mission Systems Coordinator U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch Dispatch U-2 Debrief Exercise Cells Cell 1-X, as required	Specialist Expediter	Dragon 6		
U-2 Maintenance Recovery Vehicle (Pogo Truck) Pogo U-2 Dispatch U-2 Debrief Exercise Cells Pogo Dispatch Debrief Cell 1-X, as required	Servicing Crew	Mids 1, 2 & 3		
U-2 Dispatch U-2 Debrief Exercise Cells Dispatch Debrief Cell 1-X, as required	Raytheon Mission Systems Coordinator	Merlin		
U-2 Debrief Exercise Cells Cell 1-X, as required	U-2 Maintenance Recovery Vehicle (Pogo Truck)	Pogo		
Exercise Cells Cell 1-X, as required	U-2 Dispatch	Dispatch		
	U-2 Debrief	Debrief		
SUPPORT FLIGHT	Exercise Cells	Cell 1-X, as required		
	SUPPORT FLIGHT			
Flight Commander Warrior Support	Flight Commander	Warrior Support		
Flight Superintendent Support Super	Flight Superintendent	Support Super		
Tool Crib Support	Tool Crib	Support		
12 TH AIRCRAFT MAINTENANCE UNIT				
OIC Global Lead	OIC	Global Lead		
Superintendent Global Chief	Superintendent	Global Chief		
Production Superintendent Global 3	Production Superintendent	Global 3		
Aircraft Expeditor Global 4	Aircraft Expeditor	Global 4		
Specialist Expeditor Global 5	Specialist Expeditor	Global 5		
LRE Expediter Global 6	LRE Expediter	Global 6		

MCE Expeditor	Global 7
VTC Operator	Global 10
LRE Pilot	Hawk 10
MCE	MCE
1 RS/CC	Kingpin
Ops Sup	Condor 2
GHOC	Condor 3
RAC-D	Condor 4
Mobile	Hawkeye
9 TH MAINTENANCE SQUADRON SUPERVISION	N
Commander	Hawk
Maintenance Supervisor	Hawk 1
Maintenance Superintendent	Hawk 2/Hawk Base
Mobility Chief	Hawk 3
Production Superintendent	Hawk Super
ACCESSORY FLIGHT	
Egress	Egress
Fuel Systems Repair	Fuels/Fuels Base
Fuel Systems Vehicle (Hydrazine Response Team)	HRT
FABRICATION FLIGHT	
Structural Maintenance	Sheet Metal
Non Destructive Inspection	NDI
MAINTENANCE FLIGHT	1
Flight Superintendent	Deuce 1
Periodic Inspection (U-2)	Deuce 2

Crash Recovery R Initial Response R	AR/AR Base Recovery Base Recovery 1&2&3		
Initial Response R			
	Recovery 1&2&3		
AGE FLIGHT			
Flight Superintendent A	AGE Super		
Base Station A	AGE Base		
Dispatch Vehicles A	AGE 1		
А	AGE 2		
G	Global AGE 1		
G	Global AGE 2		
PROPULSION FLIGHT			
Propulsion Supervision P	Prop Base		
Prop Propulsion P	Prop 1		
AVIONICS FLIGHT			
Sensors/Photo Shop	/iper Base		
Mobile Units V	/iper 1, 2, & 3		
9 TH LOGISTICS READINESS SQUADRON SUPERVISION			
	Supply 1		
Deputy Chief of Supply S	Supply 2		
9 TH MUNITIONS SQUADRON			
Commander A	Ammo 1		
Maintenance Operations Officer	Ammo 2		
Maintenance Superintendent A	Ammo Chief		
Munitions Flight Commander A	Ammo 3		

Exercise Supervisor K-1 Advisor	Combat Super Combat 1
K-1 Advisor	Combat 1
K-2 Advisor	Combat 2
K-3 Advisor	Combat 3
K-4 Advisor	Combat 4
Accountability Advisor	Combat 5
Breakout Advisor	Combat 6
Nancy 1 Advisor	Combat 7
Control Advisor	Combat 8
Production Section Supervisor	Production Super
Material Section Supervisor	Material Super
Equipment Maintenance NCOIC	Reaper Super
Equipment Maintenance	Reaper 1 - 99
Support Section NCOIC	Support Super
Support Crews 1-99	Support 1 – 99
SSE NCOIC	Coyote Super
SSE Dispatch	Coyote Den
SSE Crews	Coyote 1 – 99
Nightshift Super (IRON FLAG Exercise)	Owl Super
Nightshift Workers (IRON FLAG Exercise)	Owl 1-10
Maintenance Crew 1 (IRON FLAG Exercise)	Nancy 1
Maintenance Crew 2 (IRON FLAG Exercise)	Nancy 2
Maintenance Crew 3 (IRON FLAG Exercise)	Nancy 3

Operations NCOIC	OPS Super
Operations	OPS 1 - 99
Munitions Control	Control
9 TH SUPPORT DIVISION	
Transient Alert Vehicle 1	TA1
Transient Alert Vehicle 2	TA2
Metals Technology Work Center	Metals Tech
T38 CONTRACTOR	
Production Superintendent	Talon 52
5 TH RECONNAISSANCE SQUADRON	
Maintenance Operations Officer	Maintenance 1
Superintendent of Maintenance	Maintenance Chief
Sortie Generation Flight NCOIC/OIC	Maintenance 2
Aircraft Maintenance Section (APG)	Maintenance 3
Specialist/Avionic Section	Raven
Production Super	Super
Quality Assurance	QA
Maintenance Operation Center/UCC	MOC
Unit Deployment Manager	Blackcat Mobility
Pogo Truck	POGO
Launch Truck	Speedy
Blackcat Supply	Supply
Sortie Support	Support
Blackcat AGE	AGE

Delta Bay ECP/Bldg. 851	D-Bay
Charlie Bay ECP/Bldg. 843	C-Bay
Baker Bay ECP/Bldg. 849	B-Bay
Alpha Bay ECP/Bldg. 849	A-Bay
Lockheed CFSR	Lockheed

Attachment 21 (Added)

RQ-4 AIRCRAFT INITIAL ACCEPTANCE INSPECTION CHECKLIST

Figure A21.1. RQ-4 Aircraft Initial Acceptance Inspection Checklist.

Aircraft :	Date:		
Acceptance Inspection	on POC:		
WORKCENTER	<u>TASK</u>		CW Date & Initials
AMU	Delivers ai	rcraft jacket file to PS&D.	
WING PS&D	Places airc	Places aircraft in bt status for a maximum of 5 calendar days upon aircraft arrival.	
PS&D	included;	Reviews delivered jacket file; ensures all documentation is included; distributes documentation to appropriate work centers as indicated below:	
	AMU	Aircraft serial number checklist.	
	AMU	AF 2692 (-21 Verification).	
	ENG	2 AFTO 95'S (ENGINE & ENGINE TCTO) and all	
	MGMT	other engine maintenance documentation.	
	PS&D	Update LRU AFTO 95'S (20 Total) in IMDS.	
1		781 J – Updates aircraft & engine times.	
	PS&D	781K – Updates scheduled maintenance.	
	QA	Weight & balance forms (GH digital format).	
	WING PS&D	$1 \wedge \text{FIT} \cup \text{S} \cap \text{TT} \cap \text{T} \cup \text{S} \cap $	
PS&D	Schedules acceptance inspection JST in IMDS.		
AMU	Perform visual inspection under all removed panels/fairings for defects(i.e. missing/loose components, chafing, and orange wire left over from test) IAW 1-1A-8,1-1A-14 and RQ4 EPFS series TOs.		
AMU	Register emergency locator transmitter (ELT) beacon to Beale AFB as the new owner using web site http://www.beaconregistration.noaa.gov.		
AMU	Perform emergency locator transmitter (ELT) operational checkout.		
AMU	Verify OMNISTAR subscription and transfer to Beale as new subscriber.		
AMU	Verify INMARSAT subscription and transfer to Beale as new subscriber.		
AMU	Performs general visual inspection of engine IAW Rolls Royce task 72-00-00-200-801.		

AMU Completes engine serially controlled item checklist – returns		
	checklists to eng mgmt for input into IMDS.	
AMU	Performs 7 level verification of visual inspection of engine.	
	Accounts for all -21 equipment; signs AF FORM 2692 – Turns	
AMU	over control of -21 and all non specified configuration equipment	
ANIO	to support section – forwards AF FORM 2692 to PS&D for jacket	
	file.	
PRO SUPER	Verify UCF'S are current	
	Coordinates with DCC, ENGINES, AFETS, FSR, and QA to	
PRO SUPER	review all discrepancies discovered and determines if a technical	
FROSUFER	assistance request (T.O. 00-25-107) is required and which items to	
	include on the AIDR.	
PRO SUPER	Ensure aircraft fuel card is ordered.	
QA	Verify aircraft configuration/781C is current.	
AMU	Completes draft AIDR – forwards to Pro Super for certification.	
Forwards draft AIDR to Product Improvement Office for		
PRO SUPER	submittal. must be submitted to product improvement within 5	
	days of AI completion.	
PIM	Must submit AIDR to ACC & ALC within 15 days from	
FIIVI	completion of AI.	

Attachment 22 (Added)

RD2-A MCE ACCEPTANCE INSPECTION CHECKLIST

Figure A22.1. RD2-A MCE Acceptance Inspection Checklist.

MCE #:	Date:		
Acceptance Inspecti	on POC:		
WORKCENTER	<u>TASK</u>		CW Date & Initials
AMU	Deliver MCE ja	acket file to PS&D	
PS&D	Review delivered jacket file; ensures all documentation is included; distributes documentation to appropriate work centers as indicated below:		
	AMU	MCE serial number checklist	
	PS&D	781K – updates scheduled maintenance	
	WING PS&D AFTO 95 (TCTO) loads into IMDS		
PS&D	Schedule acceptance inspection JST in IMDS		
AMU	Perform inventory of equipment (hardware, external cables, & support equipment). document condition and status		
AMU	Perform inventory of system software. document status on AFTO 470 (accounted for/ missing / not supplied)		
AMU	Perform inventory of restoral software (physical media). Document status on AFTO 470 (accounted for/ missing/ not supplied)		
AMU	Document all serially controlled items and turn in to PS&D for input into IMDS		
AMU	Perform shelter set up		

Attachment 23 (Added) RD2-B LRE ACCEPTANCE INSPECTION CHECKLIST

Figure A23.1.RD2-B LRE Acceptance Inspection Checklist

LRE #:	Date:		
Acceptance Inspecti	on POC:		
WORKCENTER	<u>TASK</u>		CW Date & Initials
AMU	Deliver lre jack	et file to PS&D	
PS&D	Review delivered jacket file; ensures all documentation is included; distributes documentation to appropriate work centers as indicated below:		
	AMU	LRE serial number checklist	
	PS&D	781K – updates scheduled maintenance	
	WING PS&D	AFTO 95 (TCTO) loads into IMDS	
PS&D	Schedule acceptance inspection JST in IMDS		
AMU	Perform inventory of equipment (hardware, external cables, & support equipment). document condition and status		
AMU	Perform inventory of system software. document status on AFTO 470 (accounted for/ missing / not supplied)		
AMU	Perform inventory of restoral software (physical media). Document status on AFTO 470 (accounted for/ missing/ not supplied)		
AMU	Perform inventory of all cryptographic controlled items (CCI). Validate with base COMSEC manager.		
AMU	Document all serially controlled items and turn in to PS&D for input into IMDS		
AMU	Perform shelter set up		

Attachment 24 (Added)

MANUAL JOB CONTROL NUMBERS

Figure A24.1.1. 9th Aircraft Maintenance Squadron / 12th Aircraft Maintenance Unit

.	
SCHEDULING	6250 – 6299
DEBRIEF	6300 – 6349
SUPPORT	6350 – 6399
REDBALL	6400 – 6449
TCTO / TCI / SI / CANN	6450 – 6499
E&E ELEMENT	6500 – 6549
SPEC SECTION	6550 - 6599
ACFT SECTION	6600 – 6649
LRE SECTION	6650 - 6699
MCE SECTION	6700 - 6749

Figure A24.1.2. 9th Aircraft Maintenance Squadron / 99th Aircraft Maintenance Unit

rigure 7124.1.2. 7th fineralt Maintenance Squauron / 77th fineralt Maintenance Chit		
SCHEDULING	6750 – 6799	
DEBRIEF	6800 – 6849	
SUPPORT	6850 – 6899	
REDBALL	6900 – 6949	
TCTO / TCI / SI / CANN	6950 – 6999	
E&E ELEMENT	7000 – 7049	
SPEC SECTION	7050 – 7099	
ACFT SECTION	7100 – 7149	
LRE SECTION	7150 – 7199	
MCE SECTION	2000 – 2049	

Figure A24.1.3. 9th Maintenance Group

U-2 QUALITY ASSURANCE	2050 - 2099
T-38 QUALITY ASSURANCE	2100 - 2149

Figure A24.1.4. 9th Maintenance Group / Contract Field Teams

U-2 DEPOT TEAM	2150 – 2199
T-38 DEPOT TEAM	2200 – 2249
RQ-4 DEPOT TEAM	2250 - 2299

Figure A24.1.5. 9th Maintenance Operations Squadron

ENGINE MANAGEMENT	2300 – 2349
MAINTENANCE TRAINING	2350 – 2399
WING PLANS & SCHEDULING	2400 – 2449
WING DOCUMENTATION	2450 – 2499

Figure A24.1.6. 9th Maintenance Squadron/Propulsion Flight

JEIM	2500 – 2549
ENGINE PERIODIC INSPECTION	2550 – 2599
SMALL GAS	2600 – 2649
PROPULSION FLIGHT	2650 - 2699

Figure A24.1.7. 9th Maintenance Squadron/Accessory Maintenance Flight

EGRSS	2700 - 2749
ECS / ELECTRICS	2750 - 2799
FUELS	2800 - 2849
ACCESSORIES FLIGHT	2850 - 2899

Figure A24.1.8. 9th Maintenance Squadron/AGE Flight

SUPPORT	2900 - 2949
SCHEDULING	2950 - 2999
PERIODIC / MAJOR MAINTENANCE	3000 - 3049
SERVICING / MINOR MAINTENANCE	3050 - 3099
AGE FLIGHT	3100 - 3149

Figure A24.1.9. 9th Maintenance Squadron/Fabrication Flight

NDI	3150 - 3199
STRUCTURAL MAINTENANCE	3200 - 3249
FABRICATION FLIGHT	3250 - 3299

Figure A24.1.10. 9th Maintenance Squadron/Maintenance Flight

PERIODIC INSPECTION	3300 - 3349
SUPPORT	3350 - 3399
AIRCRAFT REPAIR & RECLAIM	3400 - 3449
MAINTENANCE FLIGHT	3450 - 3499

Figure A24.1.11. 9th Maintenance Squadron/Avionics Flight

PHOTO / SENSORS	3500 - 3549
SYERS	3550 - 3599
ASARS	3600 - 3649
EWS	3650 - 3699
IADL / DDL II	3700 - 3749

Figure A24.1.12. 9th Support Division

8 11	
TRANSIENT AIRCRAFT	3750 - 3799
METALS TECHNOLOGY	3800 - 3849
SURVIVAL EQUIPMENT	3850 - 3899
WHEEL & TIRE	3900 - 3949
PNEUDRAULICS	3950 - 3999

Figure	A 24 1 13	9th Munitio	ns Squadron
rigure	A 24. I. I.J.	. YLII WHUIIILIO	nis Sauaaron

SUPPORT ELEMENT	4000 - 4049
MAINTENANCE ELEMENT	4050 - 4099
INSPECTION / OPS ELEMENT	4100 - 4149

Figure A24.1.14. 9th Communications Squadron

COMM	4150 - 4199

Figure A24.1.15. 1st Reconnaissance Squadron

AIRCREW LIFE SUPPORT	4200 - 4249
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Figure A24.1.16. 48th Intelligence Squadron

IS	4250 - 4299

Figure A24.1.17. 13th Intelligence Squadron

IS 4300 - 4349

Figure A24.1.18. 5th Reconnaissance Squadron

ENGINE MANAGEMENT	4350 - 4399
SUPPLY	4400 - 4449
LINK CONTRACTORS	4450 - 4499
PME 1 CONTRACTORS	4500 - 4549
PME 2 CONTRACTORS	4550 - 4599
SPECIALIST SHOP	4600 - 4649
GUIDANCE & CONTROL SHOP	4650 - 4699
HYDRUALICS SHOP	4700 - 4749
AIRCRAFT SECTION	4750 - 4799
E & E SHOP	4800 - 4849
SHEET METAL	4850 - 4899
FUELS SYSTEM	4900 - 4949
EGRESS	4950 - 4999
AGE	5000 - 5049
STRUCTURAL MAINTENANCE	5050 - 5099
LOCKHEED	5100 - 5149
ASARS CONTRACTORS	5150 - 5199
ELECTRONIC WARFARE	5200 - 5249
SYERS	5250 - 5299
QUALITY ASSURANCE	5300 - 5349
PLAN & SCHEDULING	5350 - 5399

Figure A24.1.19. 1st Expeditionary Reconnaissance Squadron / Maintenance Flight

LOCKHEED	5400 - 5449
BACKSHOP	5450 - 5499
AGE SHOP	5500 - 5549
QUALITY ASSURANCE	5550 - 5599
PLANS & SCHEDULING	5600 - 5649
AIRCRAFT SECTION	5650 - 5699
SPECIALIST SECTION	5700 - 5749
SENSORS	5750 - 5799

Figure A24.1.20. 380th Expeditionary Maintenance Group / Maintenance Flight

LOCKHEED	5800 - 5849
BACKSHOPS	5850 - 5899
AGE SHOP	5900 - 5949
QUALITY ASSURANCE	5950 - 5999
PLANS & SCHEDULING	6000 - 6049
AIRCRAFT SECTION	6050 - 6099
SPECIALIST SECTION	6100 - 6149
SENSORS	6150 - 6199
PERIODIC INSPECTION	6200 - 6249
SPECIALIST SECTION SENSORS	6100 - 6149 6150 - 6199

Figure A24.1.21. 9 OG/DET 3, (Anderson) GLOBAL HAWK

RAYTHEON	7200 - 7249
FALLS CHURCH	7250 - 7299
QUALITY ASSURANCE	7300 - 7349
MECHANICS / TECHNICIANS	7350 - 7399
PLANS & SCHEDULING	7400 - 7449

Figure A24.1.22. 9 OG/DET 4, (Sigonella) GLOBAL HAWK

RAYTHEON	7450 - 7499
FALLS CHURCH	7500 - 7549
QUALITY ASSURANCE	7550 - 7599
MECHANICS / TECHNICIANS	7600 - 7649
PLANS & SCHEDULING	7650 - 7699

Figure A24.1.23. 186th Maintenance Group (Key Field) / Maintenance Flight

0	1 \	-		0	
AIRCRAFT MAINTENANCE			7700 - 7749		

Figure A24.1.24. 332nd Air Expeditionary Maintenance Group (Balad) / Maintenance Flight

riight	
AIRCRAFT MAINTENANCE	7750 - 7799

Figure A24.1.25. 451st Air Expeditionary Maintenance Group (K	Khandahar) / Maintenance
Flight	

Flight	
AIRCRAFT MAINTENANCE	7800 - 7849
Figure A24.1.26. 445th Air Expeditionary	y Maintenance Group (Bagram) / Maintenance
AIRCRAFT MAINTENANCE	7850 - 7899
Figure A24.1.27 Grand Forks	
AIRCRAFT MAINTENANCE	7900 - 7949

Attachment 25 (Added)

U-2 FCF PROGRAM

A25.1. U-2 FCF Program.

- A251.1. FCF PILOT TRAINING AND CERTIFICATION. Follow the FCF training program checklist developed by the 9 OG/FCF OIC.
- A25.1.2. Only highly qualified and experienced U-2 instructor pilots are selected as U-2 FCF pilots. Minimum qualifications are 500 U-2 hours for FCF certification.
- A25.1.3. U-2 instructor pilots receive FCF mobile training as part of the instructor upgrade syllabus and are qualified to mobile FCF missions.
- A25.1.4. U-2 FCF flight certification. One FCF certification flight is required and will be flown in
- a two seat U-2 aircraft if available. When flown in a two seat U-2, the sortie may be a training sortie or actual FCF and will be flown with a current FCF pilot. When flown in a single seat U-2, the sortie will be a training sortie and a current FCF pilot will act as the mobile. When a single seat U-2 is used for certification, the upgrade pilot and FCF pilot mobile will be scheduled for a CTP session on mission planning day before the flight.
- A25.1.5. When flying a practice FCF profile does not press battery EMER OVRIDE, as this will require maintenance action after the flight. All other electrical steps in the FCF checklist may be accomplished providing the aircraft is VMC and visual contact with the ground can be maintained. Fly practice FCF sorties with modified Dash –6 checklist boards developed by the 1 RS and the FCF/OIC.

A25.2. CURRENCY AND CREW DUTY DAY

- A25.2.1. U-2 FCF pilots will have a 90-day currency on FCF sorties. U-2 pilots may update currency on a training sortie by mission planning and flying with the appropriate practice FCF boards and performing flight control checks, manual gear extension, PRI/SEC checks, electrical sequence checks and or IFA checks. Pilots do not need to accomplish all of these items to up date currency.
- A25.2.2. If FCF currency is lost, it may be regained by flying a practice FCF profile under the supervision of a current FCF pilot/mobile.
- A25.2.3. U-2 FCF pilots will maintain a 45-day SFO currency for FCF missions.
- A25.2.4. Detachment/OL/Mission commanders may extend FCF pilot currency if the necessity for an FCF arises at and off station location with out a more highly qualified pilot available.
- A25.2.5. U-2 FCF pilots have a 10-hour crew duty day. When the pressure suit is worn, suit up

time to landing will not exceed 6 hours. High flight transition duty day limits still apply.

A25.3. SCHEDULING

- A25.3.1. Aircrew scheduling will notify the pilot, mobile and the FCF OIC of the FCF with sufficient time for mission preparation. Short notice FCFs requires direct notification to the pilot and mobile.
- A25.3.2. Aircrew scheduling will incorporate the FCF into the flying schedule and notify QA of the scheduled time.
- A25.3.3. The selected pilot/mobile will contact QA as part of their mission planning to discuss the particulars of the FCF and to coordinate the preflight QA briefing and Forms review. The preflight briefing will be held at QA, 2 hours prior to takeoff.
- A25.3.4. FCFs generated as the result of phase inspections of the TU-2 require qualified pilots in both cockpits. One pilot must be a current FCF pilot and the other an IP, IP upgrade or an FCF trainee. Other two seat FCFs may be flown either dual or solo, based on QA recommendation and pilot availability.

A25.4. FCF PILOT PROCEDURES AND RESTRICTIONS

- A25.4.1. Follow established procedures for mission planning.
- A25.4.2. Review FCF procedures prior to flight. At a minimum review ACCI 21-101 sup1, T.O. 1-1-300, Dash-6, and Dash-6 mission boards.
- A25.4.3. Pilot and mobile will meet at the ops center NLT 2+30 and proceed to base ops. If weather meets FCF criteria, file and proceed to QA for aircraft history and forms review.
- A25.4.4. Receive aircraft maintenance and status briefing from QA prior to flight. Verify that all maintenance is accomplished with complete documentation. All open write-ups and ERs must be signed off prior to pilot accepting the aircraft. Final acceptance may be accomplished on the flight line if the aircraft is "essentially" ready to go at the QA briefing.
- A25.4.5. Review/brief requirements with the mobile officer prior to flight. This review/brief should include Dash-1 and Dash-6 procedures, expanded preflight procedures, weather requirements, flight following procedures and expected pilot/mobile plan of action in the event of an in-flight emergency.
- A25.4.6. Mobile will record all ground "Mobile Officer" items on the pilots FCF board and perform preflight IAW 1 procedures.

Pay special attention to sys tems/areas in which maintenance was performed requiring the FCF.

- A25.4.7. Pilot show at aircraft is normally 45 minutes prior, with engine start 15 minutes prior to scheduled launch, to allow sufficient time to inspect systems and record data on FCF boards.
- A25.4.8. Verify proper operation and displacement of all flight controls with ground crew and verify proper rudder and turn response with mobile.
- A25.4.9. Use maximum runway availability for launch when practical. FCFs on a second attempt or when major maintenance was not performed may use intersection takeoffs IAW with local procedures.
- A25.4.10. U-2 mobile officer will flight follow the U-2 on UHF or VHF radio from takeoff to the point where the aircraft is climbing above FL600 and then again during the descent to landing.
- A25.4.11. U-2 pilots will remain within glide distance of the primary landing base, or a suitable alternate, until all engine and fuel checks have been accomplished.
- A25.4.12. U-2 FCF minimum weather is day, VMC and 3 miles visibility. OG/CC or designated representative (Detachment/OL/Mission Commander) is waiver authority for T.O. 1-1-300 Para 6.2. authorizing "VFR on top" FCFs. When conducting "VFR on top" FCF missions, minimum weather at departure base is 5000 AGL and 5 miles visibility and all FCF checklist items must be conducted in VMC.

A25.5. ANY OF THE FOLLOWING WOULD CAUSE AN FCF TO BE A NONRELEASE:

- A25.5.1. Any system malfunction that does not allow the aircrew to complete the FCF. If the original condition that generated the FCF check good, and the only item(s) not checked can be easily evaluated by a pilot on a normally scheduled sortie, then the aircraft can be released with a write-up to check the item(s).
- A25.5.2. Any system malfunction that would in the course of correcting the malfunction generate another FCF. (Example: Flight control rigging problems, or EFTC replacement)
- A25.5.3. Engine surges, compressor stalls or flameout.
- A25.5.4. Critical systems that do not meet criteria. Critical items on the Dash-6 checklist boards are identified with an asterisk.
- A25.5.5. If a malfunction or series of malfunctions occur that the FCF pilot feels should be evaluated more closely, then he/she has the option of not releasing the aircraft.

Attachment 26 (Added)

IMPOUNDMENT OFFICIAL CHECKLIST

Figure A26.1. Impoundment Official Checklist.

	YES	NO (COMMENTS)
1. Have impounded aircraft, equipment or engine been isolated using cones, ropes and placards?		
2. Has the MOC/QA been notified?		
3. Has access been limited to authorized personnel only?		
4. Have all historical records and forms been obtained?		
5. Has wing safety been notified for mishaps, which meet the AFI 91-204 reporting criteria?		
6. Have the aircrew, crew chiefs, mobile, and pogo crew been debriefed? (Prepare questions, take notes, obtain written statements as necessary)		
7. Have appropriate specialists and supervisors been selected to develop an investigation and troubleshooting plan?		
8. Is fuel, oxygen, oil, or hydraulic samples required?		
9. If required, have all Sensor (RQ-4 and U-2) items been removed prior to performing impound maintenance?		
10. Have the aircraft/equipment active forms been annotated with the appropriate 781A discrepancies for impoundment?		
11. Has the 9 MXG/CC been briefed on all actions or findings as required?		
12. Has the "released for maintenance" block in the AFTO FORM 781A been signed authorizing maintenance? (For impounded equipment, has the "release for maintenance" block of the equipment worksheet been signed?		
13. After the cause of the impoundment malfunction has been corrected, has the "impound official review" block been signed off and the red dash symbol initialed? (For equipment, sign the appropriate review block of the equipment impoundment worksheet).		
14. Have the forms been reviewed and signed off by Quality Assurance?		

Attachment 27 (Added)

UNIT WWID LIST

Figure A27.1. Unit WWID List.

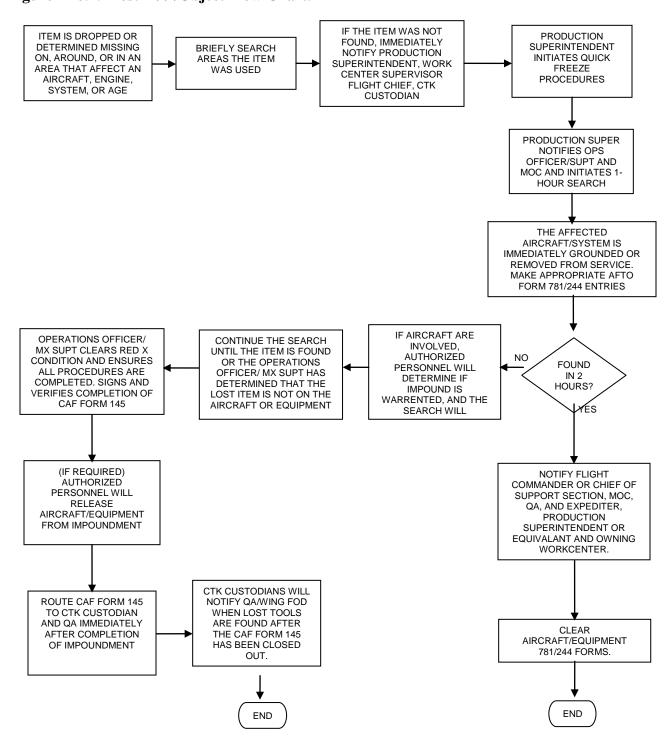
UNIT	WWID
MC-12	L53
9 AMXS/99 AMU	BDAM01 – 50
9 AMXS/12 AMU	BDAM51 – 99
9 AMXS/12 AMU/Ground Comm	BDGC1-50
	BDMXA – EACC
	BDMXF – JAGE
	BDMXK – OFAB
	BDMXP – TPROP
	BDMXU – ZMAINT
	BDMX00 - 20OBC
	*OA-071ABAE
	*OA-090ABAE
	*U010BAE
	*SPUR01L3/Data Link
9 MXS	*OA-086DL3/Data Link
	*OA-086 ^E L3/Data Link
	*BDMX50200SYERS
	*SYERS 10SYERS
	*OA-022.ASARS
	*OA-022A – B.ASARS
	*BDMX1001PME-1
	*BD4RJ0001.PME-2
	*BDCMU0200.PME-2
	* BDCMU0300PME-2
	* BDCMU0400PME-2
9 PSPTS	BDPDA01 – BDPDZ99
1 RS Life Support	BDLSA01 – BDLSZ99
9 MXG/QA	BDQA01 – BDQA50
Lockheed Martin	LMSW01 – 12
T-38 Contractor	BDMO
Mission Systems Section	BDCMA01 – BDCMZ99
5 RS	BD5R00001 – BD5RZZZZZ
1 ERS	BD4RA01 – BD4RZ99
Det 3	ATGHassigned by Andersen AB
Det 4	SNAMAMU
	SNABMXS
9 MUNS	BDMUA1 – BDMUZ99
372nd Training Squadron, Det 21	BDTD01 – 15
9 SD	As designated in memorandum for record from 9 SD

^{*}EID for contractor maintained equipment/tools.

Attachment 28 (Added)

LOST TOOL/OBJECT FLOW CHART

Figure A28.1. Lost Tool/Object Flow Chart.



Attachment 29 (Added)

AIRCRAFT HANGARING CHECKLIST

Figure A29.1. Aircraft Hangaring Checklist.

TOW SUPERVISOR WILL ENSURE C				
CHECKLIST. PERFORM THIS CHECKLIST WHEN TOWING U-2S/ST AND RQ-4 AIRCRAFT INTO DOCKS 1-8(This checklist is not applicable to the U-2/RQ-4 shelters or Dock 8				
open bay)	ZKIISt IS HOT a	ipplicable to	the 0-2/RQ-4 shellers of Dock o	
Date in: Time in:_	A	Aircraft:	Hangar:	
	TO TOWING			
1.1 Ensure hangar doors are open sufficient	ently to provid	de a minimur	n of 10-feet wing tip clearance.	
If 10-feet of wing tip clearance cannot be REF: AFOSHSTD 91-100	e obtained, ens	sure doors are	e opened to the maximum limit.	
	ER HANGAI			
2.1 Ensure hangar Facility Inspection has	s been perforn	ned for the da	ay. (if applicable)	
2.2 Place drip pans/absorbent pads under	aircraft as red	quired.		
2.3 For U-2S/ST place this checklist on t			ehind nose split line (FS 169).	
For RQ-4 place this checklist in the aircr	aft's forms bi	nder.		
Tow SupervisorRANK/PRINT NAM	/		EMP #	
RANK/PRINT NAM	<u>E</u>	SIGNATU	URE	
RANK/PRINT NAM BEFORE REMOV 3.1 Re-accomplish steps 1.1 and 2.1.				
3.1 Re-accomplish steps 1.1 and 2.1.	'ING AIRCR	AFT FROM	I HANGAR	
BEFORE REMOV	'ING AIRCR	AFT FROM	I HANGAR	
3.1 Re-accomplish steps 1.1 and 2.1.	TING AIRCR	AFT FROM	I HANGAR	
3.1 Re-accomplish steps 1.1 and 2.1. 3.2 Police up excess AGE, support equip 3.3 Clean up all spills, drip pans, and ens 3.4 Upon exit, place the completed check	oment, and airc	AFT FROM	I HANGAR panel racks.	
3.1 Re-accomplish steps 1.1 and 2.1. 3.2 Police up excess AGE, support equip 3.3 Clean up all spills, drip pans, and ens 3.4 Upon exit, place the completed check hangared acft).	oment, and airconnect tow path its	AFT FROM	I HANGAR panel racks.	
3.1 Re-accomplish steps 1.1 and 2.1. 3.2 Police up excess AGE, support equip 3.3 Clean up all spills, drip pans, and ens 3.4 Upon exit, place the completed check	oment, and airconnect tow path its	AFT FROM	I HANGAR panel racks.	
3.1 Re-accomplish steps 1.1 and 2.1. 3.2 Police up excess AGE, support equip 3.3 Clean up all spills, drip pans, and ens 3.4 Upon exit, place the completed check hangared acft).	oment, and airconnections of the same tow path in the Har	craft parts on is clear.	inspection binder(until next Emp#	

Attachment 30 (Added)

EGRESS SYSTEM EXPLOSIVE OPERATION PRE-TASK SAFETY BRIEFING

A30.1. Egress System Explosive Operation Pre-Task Safety Briefing.

	Date:
Pe	rson 1:
Pe	erson 2:
1.	The purpose of this letter is to establish a guide from which a supervisor can brief personnel prior to explosive operations, associated with the 9 MXS Egress section.
	a. All operations requiring personnel to work on or come in contact with explosive items will have a designated task supervisor. The task supervisor will be responsible for providing a pre-task briefing to all involved personnel utilizing the checklist below and following the 9 MXS Explosive Mishap Notification Procedures (located in Weapons Safety Program Management Book) in the event of an explosive accident or incident.
2.	Type of explosive operation being accomplished (example: seat inspection, time change, etc.) :
	 a. The task supervisor for this operation is Person 1. b. The explosive(s) involved in this operation have a fire symbol of 1.3 / 1.4. c. The explosive hazards particular to this operation are Pin-Fired/Gas-Fired Initiators and other Gas-Fired Munitions. d. Personnel limits during explosives operations are supervisors (4), workers (4), and casuals (4). SUPV: WORKERS:CASUALS: TOTAL: Stop operations when visitors are present.
3.	Brief technicians on safety practices applicable to this operation and enforce all safety requirements governing activity.
4.	Brief technicians on individual responsibilities prior to beginning operation.
5.	IN CASE OF FIRE DURING EXPLOSIVE OPERATION

- a. **Person 1** will immediately notify fire department, call 9-1-1, yell "FIRE" / pull fire alarm (located on front and rear of building 1240, Egress), and position an individual outside to direct fire department personnel.
- b. **Person 1** will attempt to extinguish and note time munitions were engulfed in flames. Do not fight fire if 1.3 explosives are directly involved.

- c. <u>Person 1</u> will evacuate building of non-essential personnel to minimum distance of 300 ft for Fire Symbol 4. All non-essential personnel will meet at LOX Bay (Bldg 1230). Roll call will be taken to account for all personnel.
- d. <u>Person 1</u> will evacuate building of non-essential personnel to minimum distance of 600 ft for Fire Symbol 3 and notify LOX Bay (Bldg 1230) to evacuate. All non-essential personnel will meet at the picnic pavilion behind AGE Flight (Bldg 1225). Roll call will be taken to account for all personnel.

6. IN CASE OF PERSONAL INJURY DURING OPERATION

- a. **Person 2** will call 9-1-1 and describe injury.
- b. **Person 2** will attempt to administer Self-Aid and Buddy Care.
- c. <u>Person 2</u> will position an individual outside to direct medical service personnel.
- 7. Any questions regarding this policy letter should be directed to the Egress Section Chief at ext. 4-9049.

Attachment 31 (Added)

U-2 PRE-RUN INSPECTION WORKSHEET

Figure A31.1. U-2 Pre-Run Inspection Worksheet.

AMU:

NOTE: Prior to aircraft start for high power/trim pad runs 88% and above, personnel will accomplish and document the following items. Aircraft run supervisor will ensure applicable T.O. requirements have been met, and the worksheet is complied with. This document will be maintained in the 781A series forms.

Run Screen #:

AMU:	ACFT S/N:	Run Screen #:		:		
ENG S/N:	JCN:	EOT/CYO		CLES:		
AREA OF INSPECTION		SIGN	IATURE	EMP#	DATE	
1. Inspect inlet for loss or	r missing hardware					
and engine fan/compress	or for freedom of					
rotation and foreign obje	cts					
2. Inspect engine exhaus	t for damage and					
foreign objects						
3. Inspect aircraft exterio	or for loose,					
missing hardware, foreigr	n objects and fluid					
leakage						
4. Visually inspect engine	components for					
wear, nicks, fluid leakage,	, component					
installation, safety wire a	nd general					
serviceability						
5. Ensure engine is prope	erly serviced					
6. Inspect tie downs, mod	oring points for					
annual NDI inspection, lo	ose hardware and					
foreign objects						
7. Inspect run screen for	serviceability,					
deterioration, and ensure	all pins are					
installed correctly and sec	cured					
8. CTK Inventory C/W, an	d test equipment					
properly stored before ea	nch engine start					
9. Ensure serviceable fire	extinguisher is on					
hand						
10. Check engine run trin	n pad for debris					
and foreign objects						

11. Ensure all preliminary aircraft		
installation and run requirements have		
been met IAW applicable technical data		
12. Run supervisor will conduct emergency		
procedures briefing		
REMARKS:		

Attachment 32 (Added)

T-38 PRE-RUN INSPECTION WORKSHEET

Figure A32.1. T-38 Pre-Run Inspection Worksheet.

NOTE: Prior to aircraft start, personnel will accomplish and document the following items. Aircraft Run Supervisor will ensure applicable T.O. requirements have been met, and the worksheet is complied with and maintained in the 781A series forms.

AREA OF INSPECTION	SIGNATURE	EMP#	DATE
. Inspect inlets for loose or missing hardware and			
engine compressors for freedom of rotation and			
foreign objects			
2. Inspect engine exhausts for damage and			
foreign objects			
3. Inspect aircraft exterior for loose, missing			
hardware, foreign objects and fluid leakage			
4. Visually inspect accessible engine components			
for damage, fluid leakage, component installation,			
safety wire and general serviceability			
5. Ensure engines are properly serviced			
6. Inspect tie down and mooring points for annual			
NDI inspection, loose hardware and foreign			
objects			
7. Inspect run fences for serviceability,			
deterioration, F.O. and loose or damaged			
hardware and both brakes are properly set			
8. CTK Inventory C/W, and test equipment			
properly stored/secured before each engine start			
9. Ensure serviceable fire extinguisher is on hand			
10. Check engine run area for debris and foreign			
objects			
11. Ensure all preliminary aircraft run			
requirements have been met IAW applicable			
technical data			
12. Conduct emergency procedures briefing			
13. Run Supervisor will ensure all items are			
completed			
REMARKS:			

Attachment 33 (Added)

RQ-4 PRE-RUN INSPECTION WORKSHEET

Figure A33.1. RQ-4 Pre-Run Inspection Worksheet.

NOTE: Prior to aircraft start, personnel will accomplish and document the following items. Aircraft Run Supervisor will ensure applicable T.O. requirements have been met, and the worksheet is complied with and maintained in the 781A series forms.

ACFT S/N:	#1 ENG S/N:	Reason for run:
JCN:		

AREA OF INSPECTION	SIGNATURE	EMP#	DATE
1. Inspect inlets for loose or missing hardy	vare and		
engine compressors for freedom of rotation	on and		
foreign objects			
2. Inspect engine exhausts for damage and	d foreign		
objects			
3. Inspect aircraft exterior for loose, missi	ng		
hardware, foreign objects and fluid leakag	e		
4. Visually inspect accessible engine comp	onents		
for damage, fluid leakage, component inst	allation,		
safety wire and general serviceability			
5. Ensure engines are properly serviced			
6. Inspect tie down and mooring points fo	r annual		
NDI inspection, loose hardware and foreig	n objects		
7. Inspect run fences for serviceability,			
deterioration, F.O. and loose or damaged I	hardware		
and both brakes are properly set			
8. CTK Inventory C/W, and test equipment	t		
properly stored/secured before each engin	ne start		
9. Ensure serviceable fire extinguisher is o	n hand		
10. Check engine run area for debris and f	oreign		
objects			

11. Ensure all preliminary aircraft run		
requirements have been met IAW applicable		
technical data		
12. Conduct emergency procedures briefing		
13. Run Supervisor will ensure all items are		
completed		
REMARKS:		

Attachment 34 (Added)

5TH RS SAV AREAS

A34.1. 5th Reconnaissance Squadron SAV Areas.

AREA	C&SRL	SAV
Group Commander Responsibilities	90-2301	1
Plans Scheduling & Documentation Program	90-2304	1
Engine Management	90-2358	1
Maintenance Date System Analysis	90-2305	1
Maintenance Operations SQ, Program Section	90-2306	1
Maintenance Operations Center	90-2310	1
Engineering and Technical Services	90-2355	1
Personnel Security	90-289	1
Quality Assurance	90-2356	1
Aircraft Maintenance Training	90-2357	1
Oil Analysis and SEM/EDX Programs	90-2317	1
Engine Blade Blending	90-2372	1
Aircraft Inlet/Exhaust	90-2373	1
Flexible Borescope Program	90-2408	1
Foreign Object Damage Prevention	90-2409	1
AMXS Maintenance Operations officer/SUPT Duties	90-2307	2
AMU Plans Scheduling & Documentation Duties	90-2308	2
Aircraft Maintenance Unit	90-2309	2
OIC/SUPT		
Aircraft General Section Specialist section		
Support Section		
Maintenance Debriefing	90-2315	2
AMXS Precious Metals Recovery	90-2329	2
AMXS Supply Management	90-2343	2
AMXS Composite Tool Kit Program	90-2405	2
MXS Maintenance Operations officer/SUPT Duties	90-2307	2
MXS Precious Metals Recovery	90-2329	2
MXS Supply Management	90-2343	2
Propulsion Flight	90-2360	2
Avionics Flight	90-2362	2
Accessories Flight	90-2363	2
AGE	90-2364	2
Fabrication Flight	90-2365	2
Maintenance Flight	90-2366	2
MXS Composite Tool Kit Program	90-2405	2

Attachment 35 (Added)

Det 3 SAV AREAS

A35.1. Det 3 SAV Areas.

AREA	<u>C&SRL</u>	SAV
Group Commander Responsibilities	90-2301	1
Plans Scheduling & Documentation Program	90-2304	1
Maintenance Operations SQ, Program Section	90-2306	1
Personnel Security	90-289	1
AMXS Maintenance Operations officer/SUPT Duties	90-2307	1
AMU Plans Scheduling & Documentation Duties	90-2308	1
Aircraft Maintenance Unit	90-2309	1
OIC/SUPT	90-2315	1
AMXS Precious Metals Recovery	90-2329	1
AMXS Supply Management	90-2343	1

Attachment 36 (Added)

Det 4 SAV AREAS

A36.1. Det 4 SAV Areas.

AREA	C&SRL	SAV
Group Commander Responsibilities	90-2301	1
Plans Scheduling & Documentation Program	90-2304	1
Maintenance Operations SQ, Program Section	90-2306	1
Maintenance Operations Center	90-2310	1
Engineering and Technical Services	90-2355	1
Personnel Security	90-289	1
Quality Assurance	90-2356	1
Aircraft Maintenance Training	90-2357	1
Oil Analysis and SEM/EDX Programs	90-2317	1
Engine Blade Blending	90-2372	1
Aircraft Inlet/Exhaust	90-2373	1
Flexible Borescope Program	90-2408	1
Foreign Object Damage Prevention	90-2409	1
AMXS Maintenance Operations officer/SUPT Duties	90-2307	1
Aircraft Maintenance Unit	90-2309	1
OIC/SUPT		
Aircraft General Section Specialist section		
Support Section		
Maintenance Debriefing	90-2315	1
AMXS Precious Metals Recovery	90-2329	1
AMXS Supply Management	90-2343	1
AMXS Composite Tool Kit Program	90-2405	1
MXS Maintenance Operations officer/SUPT Duties	90-2307	1
MXS Precious Metals Recovery	90-2329	1
MXS Supply Management	90-2343	1
Accessories Flight	90-2363	1
AGE	90-2364	1
Fabrication Flight	90-2365	1
MXS Composite Tool Kit Program	90-2405	1

Attachment 37 (Added)

1ST ERS SAV AREAS

A37.1. 1St Expeditionary Reconnaissance Squadron SAV Areas.

AREA	C&SRL	SAV
Group Commander Responsibilities	90-2301	1
Plans Scheduling & Documentation Program	90-2304	1
Engine Management	90-2358	1
Maintenance Date System Analysis	90-2305	1
Maintenance Operations Center	90-2310	1
Engineering and Technical Services	90-2355	1
Personnel Security	90-289	1
Quality Assurance	90-2356	1
Oil Analysis and SEM/EDX Programs	90-2317	1
Engine Blade Blending	90-2372	1
Aircraft Inlet/Exhaust	90-2373	1
Flexible Borescope Program	90-2408	1
Foreign Object Damage Prevention	90-2409	1
AMXS Maintenance Operations officer/SUPT Duties	90-2307	1
AMU Plans Scheduling & Documentation Duties	90-2308	1
Aircraft Maintenance Unit	90-2309	1
OIC/SUPT		
Aircraft General Section Specialist section		
Support Section		
Maintenance Debriefing	90-2315	1
AMXS Precious Metals Recovery	90-2329	1
AMXS Supply Management	90-2343	1
AMXS Composite Tool Kit Program	90-2405	1
MXS Maintenance Operations officer/SUPT Duties	90-2307	1
MXS Precious Metals Recovery	90-2329	1
MXS Supply Management	90-2343	1
Propulsion Flight	90-2360	1
Avionics Flight	90-2362	1
Accessories Flight	90-2363	1
AGE	90-2364	1
Fabrication Flight	90-2365	1
Maintenance Flight	90-2366	1
MXS Composite Tool Kit Program	90-2405	1

Attachment 38 (Added)

FOD/DOP INCIDENT WORKSHEET

Figure 38.1. FOD/DOP Incident Worksheet.

MOC, QA, and Wing FOD/DOP Manager must be notified of all FOD/DOP Incidents immediately Send copy of this report to: ACC.FOD@LANGLEY.AF.MIL within 72 hours of the incident

I. GENERAL DATA			
	WAS DR SUBMITTED? YES	NO	
DOP INCIDENT	NON-PREVENTABLE		NON-CHARGEABLE
FOD INCIDENT	PREVENTABLE		CHARGEABLE

ORGANIZATION/BASE	DATE/TIME OF INCIDENT	REPORT CONTROL#
ORIGIN OF SORTIE	DATE OF LAST PHASE/ISO INSP	MDS/TAIL NUMBER
LAST MAINTENANCE/INSPECTION PERFO	DRMED IN AREA (BE SPECIFIC)	
DESCRIPTION OF INCIDENT		
DESCRIPTION OF INCIDENT		

II. FOD INCIDENT DATA

ENGINE TYPE	ENGINE SERIAL #	ENGINE POSITION
TOTAL ENGINE TIME	TIME SINCE OVERHAUL	DATE INSTALLED ON AIRCRAFT

OBJECT DROPPED	LOCATION OF OBJECT (IF KNOWN)	APPROX SIZE/WEIGHT
PART NUMBER NSN	WUC T.O.	FIG INDEX

IV. FINDINGS

PARTS COST	LABOR COST		TOTAL COST		
	INVESTIGATION FINDIN	GS			
	ACTION TAKEN T.O. PRI	EVENT RECURRENCE			
UNIT FOD/DOP MONITOR	-	RANK	PHONE		
UNIT MAINTENANCE OFFIC	ER	RANK	PHONE		

Attachment 39(Added)

STATIC AIRCRAFT REQUEST

A39.1.	Static A	arcrait K	equest.						
MEMC	RANDUI	∕I FOR 9 I	MXG/C0						
FROM									
SUBJ	ECT: O	fficial A	ircraft S	Static I	Display Rec	juest.			
						le sup, Para 7.1 g information t			
Group	name/d	escriptio	n:			<u>-</u>			
Purpo	se:							-	
POC:	Rank/Na	ame:			_				
Conta	ct numb	er:							
2. Re	quests:	(identify	type ni	ımber	of assets re	quested)			
T-38	RQ-4	MCE	LRE	U-2	INSIDE	BRIEFERS	TIME	DATE	# IN TOUR
3. Co	ordinatio	on, (only	if appl	icable)):		I	1	
T-38 S	Supervis	ion/Sche	duling;	Can/o	cannot supp	ort			
12 AN	1U Supe	ervision/S	Schedul	ling: (Can/cannot	support			
99 AN	ИU Supe	ervision/S	Schedul	ling; (Can/cannot	support			
9 AM	XS Supe	ervision (9 AMΣ	KS/MX	(A): Can/ca	.nnot support			
4. Lo	cation of	f static re	quest v	vill be:	ː	po	er:		
5. Vis	it is appı	oved/dis	approv	ed by	9 MXG/CC	·		Date:_	